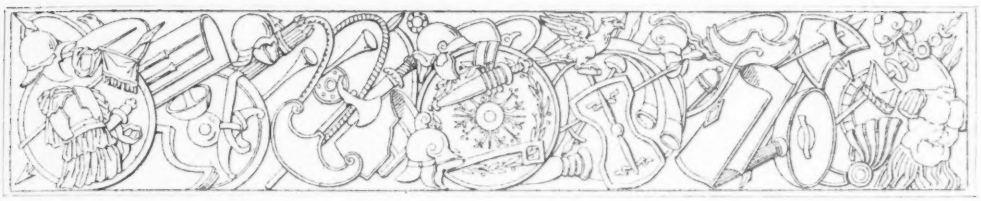


ADDRESS TO STUDENTS. By the President, FRANCIS C. PENROSE, F.R.S., at the Sixth General Meeting, Monday, 14th January 1895.

GENTLEMEN,—

FROM the two preceding Presidents you have received, at this period of our Session, Addresses of high professional value. These Addresses, and especially the last three, occupy so large a field of the practical requirements of students, and I may say, not of students only, but of fully-fledged architects also—for indeed we should all be classed as students, and be brought within the definition which Michael Angelo gave of his own position when he answered some one who marvelled at seeing him, in the zenith of his fame, busy measuring a piece of antique detail, "I also am a student"—that it would be unnecessary and undesirable for me to enlarge upon it. I cannot, however, avoid repeating here and there what Mr. Anderson has so admirably brought before you, as when in his first discourse he rightly claimed for Planning the title of an art—for an art it is, quite as much as when a sculptor studies the anatomy and the skeletons of the figures of his groups, or when a landscape painter arranges the articulation of the limbs and trunks of the trees which he proposes to cover with foliage. I would strongly advise the younger students who did not hear the discourses I speak of, to refer to those numbers of the JOURNAL which contain them; and not only to the Address on Planning which I have mentioned, but also to those later Addresses on the reciprocal duties of students, and commencing architects, to their teachers, their work, their employers, their professional brethren, and to themselves—qualities affecting character which are quite as necessary to success, or even more so than intellectual or artistic power and learning.

THE EXAMINATIONS.

Under the new regulations, a very important matter to any one entering the profession must necessarily be the Examinations, which he must pass to qualify him for a place in this Institute, at any rate—and it is not unlikely that something analogous will practically come to be required of all architects. Care has been taken to make these Examinations a fair test of efficiency, yet not so severe as to form an inaccessible bar to those whose talents show real sympathy with the profession of architecture; so that the passage shall not be an obstruction to any one who, although only moderately endowed with natural quickness, is willing to entertain the one thing needful, alike to him as to one with an intellect of the highest order, namely, fondness for the profession as the great aim in life, and the determination to secure the necessary steps by careful and continuous study. But it should be borne in mind that, important as is the passing of the Examinations referred to, they should be considered, not as the final end in view, but as the means of attaining it. And I specially mean by this observation that work of the nature of "cram" is to be discountenanced. The Examination questions are very properly published in the KALENDAR as a guide to the sort of examination the candidates are to expect; but it would be a very bad preparation to dwell too much on the confines, as I might call it, of such published questions, instead of study of a broader description. The Examinations may easily take such a turn as to defeat a partial preparation;

but a candidate who has a good general knowledge is much less likely to be nonplussed. It is of vital importance that whatever subjects are studied, whether in a broader or narrower circle, should be fully assimilated.

DRAUGHTSMANSHIP.

Dismissing these remarks on the door of admission to our ranks, I will endeavour to place before you some considerations which long experience has led me to think essential to success in Design.

The very first thing for a student to acquire is the power of accurate drawing, the obedience of the hand to the eye, and the ready manipulation of the instruments he uses. These may have been already partially attained; if so, so much the better; but they are indispensable. I will suppose the student entering an architect's office. If in that office there are, as is probable there would be, assistants and senior pupils, the natural modesty of a youth will perhaps inculcate an amount of shyness which will hinder him from gaining from them, at first, sufficient information as to the meaning of what is going on; but in ordinary cases this shyness soon wears off, and he will find his seniors ready to give information, especially if asked for at convenient times. This manner of study was practically the only one available to aspirant architects when I first began my studies, and very few books were usually accessible. The only book in the office where I was a pupil was Peter Nicholson's *Dictionary*—a book I by no means undervalue, but mention to show how limited our literature was in those days. It is very different now. The extensive Library of the Institute is open to you, and there are courses of all kinds which you may attend. Still, the value of the instruction in an architect's office, especially in practical matters and construction, remains where it did, in addition to the advantage of friendships generally formed there with fellow-pupils.

Passing through the copying stage, you will begin to sketch, whenever opportunities offer, from existing buildings. In visiting works in progress do not be shy of asking the Clerk of Works the meaning of what you see. You will seldom find him disinclined to give information. Some of you doubtless will join in the pleasant and profitable Architectural Association excursions. In these I may venture to offer some advice to students, drawn from my own experience at this stage.

Suppose you have come to study some ancient building of merit—I do not mean that the advice would not be equally applicable to a modern building; but ancient structures are more attractive, and more likely to be visited for detailed study. The first inclination would be to get a note or sketch of everything that takes the fancy; and I find in my early sketchbooks pages and pages of different objects too slightly drawn, and only now and then is there a subject sufficiently explained to be a proper memorandum of what I saw, and which then attracted my attention so much. It is better, instead of rushing to work in this way, to spend some time in the general examination of the building, and to write down as concisely as possible, in a clear hand, and not too small (remembering that the keenness of youthful eyesight does not last for ever), what you think to be the chief characteristic of the work before you, and not till then devote such time as is available to sketching. Try to make your sketches as accurate and clear as you can. If there be time for a general view to be finished adequately, it may possibly be the most valuable; but if not, choose such piece or pieces of detail as can be properly rendered. Endeavour to get an accurate outline, together with plans and sections of mouldings; never mind how much time and how much use of india-rubber it may require, for rapidity and artistic effect come with practice. Leave your sketches alone when you leave the place; or should any relaxation be allowed to this rule, it should be limited to what may be done at the first resting place, before the distinct impression produced by what you have endeavoured to portray has been effaced from the mind. This distinct impression can hardly ever last more than a few hours.

We may ask ourselves, what is the great value of this power of sketching? Is it to store up plenty of material for copying? In respect to new designs, certainly not. For restoration of ancient buildings—on which I propose to make some further remarks—no doubt such sketches may be of great service, so far as they are accurate. The chief value of the power of sketching in designing new buildings I conceive to be twofold: one is, that facility in sketching gives an architect readiness in designing in perspective concurrently with his geometrical elevations and sections; but the main advantage, as it appears to me, is that, from familiarity with his own rendering of an existing building, he can realise better the effect that a design from his own hand will have in execution. For this end you will see the high importance of accurate representations. Picturesque treatment is quite another thing. If the drawing be both accurate and picturesque, so much indeed the better; but of the two, accuracy is the needful quality. A design cannot win true excellence unless it is right both in form and colour. Form is the more important of the two, but injudicious combination of colours may spoil a well-formed design. When simple materials are used, the colour can seldom be wrong; but when stronger contrasts are attempted, much care will be necessary. In sketching from nature, including buildings, too much attention to colour is apt to induce carelessness in respect to form. One of the finest and most truthful artists both in form and colour as a landscape and architectural painter I ever knew, the late Rev. John Pettit, was so much aware of this tendency that during three years of his earlier work he denied himself altogether the use of colour, and drew simply in monochrome. In studying a design where much colour is proposed I would recommend a complete representation in monochrome before any coloured drawing is made. It is right also to caution the architectural student against striving too much after architectural effect.

It may be said that in architects' competitions the picturesque style prevails, and is most telling. I believe that committees who invite competitions are becoming aware of the weakness of the competitive system in this respect, and it is now not unusual to find among their conditions that "only geometrical drawings" are required.

During the earlier years of his education (whatever he may feel inclined to do afterwards) I should advise the student to make no use whatever of photographic apparatus. His object should be to impress the forms he sees upon the mind, to educate the hand to follow the mind's conceptions with rapidity and certainty; not merely to store up examples in portfolios, which can be of very limited use to him in comparison. I am not referring to collections of photographs by others, but to his own particular study.

GEOLOGY AND ARCHÆOLOGY IN RELATION TO ARCHITECTURE.

Besides drawing, and the practical studies of construction, &c., there are some subjects which the student should recognise as not unconnected with architecture, though any particular study of them is, very rightly, scarcely even suggested in the curriculum recommended in the KALENDAR. I refer particularly to two of these, which are very fascinating subjects for research, namely geology and archæology, using those terms in their fullest sense. I am far from meaning that a student can be properly equipped if he is quite ignorant of those subjects; for no proper knowledge of masonry can be altogether independent of geology, and the knowledge of the different characteristics of Classical and Mediæval architecture is not attainable without an acquaintance with the general principles of archæology; but the more detailed researches in such subjects may, for those whose inclination leads them to it, be left for future leisure—and, as "the wise housekeeper will bring forward out of his treasure things new and "old," it will not be without profit for him to do so; but the old is mainly valuable for the sake of the new. Good architecture in all time has been the development of what has gone before; and unless the new is well keyed into the old, there is no reasonable prospect whatever of

success. Too close an adherence to the past is also to be deprecated, but on different grounds. There is, however, one exception to this last remark. I refer to the case of those who may be engaged in the restoration of churches and other ancient buildings. In works of this nature archæological conditions should be paramount, or only controlled by the requirements of Divine service or other necessary use; but it should be historical archæology, and not selective. In restorations it is scarcely possible to be too conservative. It has not unfrequently happened in church restorations that valuable historical links have been sacrificed to the preference of the characteristics of some particular period. True loyalty to historical succession, and attention to the advice given in the Papers on the subject which have been issued on the authority of the Institute (see pp. 298–307 of the KALENDAR), will almost always point out the right path; but as cases of difficulty might arise, I should recommend a commencing architect, who finds himself face to face with a difficulty of this kind, to put himself in communication with the department of the Institute under which this subject has been considered; and from this body a *bona-fide* communication would be sure to receive a courteous and careful reply. If additions have to be made to old buildings of various styles, the circumstances will generally point out which of these styles ought to be followed. The architect, however, should not allow individual fancy to prevail too much in selection, but should endeavour to put himself as far as possible in the position of a surviving partner to the designer of the original building, and should think at least as much of his predecessor as of himself. In new creations of his own, carried out in any recognised style, I would by all means advise him, whilst inspired and guided by archæological teaching, not to allow himself to be confined and hampered by it. The new materials and means now available cannot but lead us, as years go on, more and more away from the past; to succeed, however, it must be done, not by revolution, but by evolution.

To sum up in a more succinct manner what I have said on this subject, the student and commencing architect should be so far an archæologist as to study, and endeavour fully to understand, the development of the Classical styles of architecture from the best Greek period to the Decline. The Roman variety, with its important accessory the arch, its earlier and better phases, and final corruption. The Mediæval styles which followed, especially our English development from the Norman to the Tudor, taking cognisance also of the associated arts of sculpture and painting of all those periods. But with respect to the special domain of antiquaries, such as painted vases, palæography, coins, jewels, and heraldry, he must remember that art is long, and life short. Nevertheless, should his inclination lie that way, there is no reason against his indulging in the hope that at some future time he may have leisure for a more complete examination of them. If architecture be well studied, practically and historically, sufficient general knowledge on the necessary archæological points connected with it will come in its train. A detailed knowledge will not assist him in his art, and it may absorb time better employed—at first, at any rate—in practical construction. I have no desire to undervalue the study of archæology proper; but as it has become a much more favourite study than formerly, and is itself an engrossing and fascinating subject, all I wish to do is to point out that it is not one of the primary desiderata for the student, except so far as it comes to him in connection with the history of architecture. On the more abstruse parts of this, as well as the other allied sciences to which I have made allusion, it is well to be content with the advice of specialists when occasion for it may arise.

MATERIALS.

One of the most important considerations at the outset of architectural study is to entertain sound notions respecting materials, not only as regards their strength and durability,

but as to their proper employment; and especially so when we consider the number of new materials now available. I am not advising the patronage of novelties, but of such as have already won the favour of practical men. In actual building it is well to remember that whilst studying all reasonable economy, which is a duty in almost every case, sufficient solidity of construction and well-chosen material, and a good shape, which generally involves but little, if any, extra cost, are far preferable, and will give more satisfaction, both to the employer and the general public, than any effect to be obtained by ornament. To give a very simple illustration: a plain chimney-stack, surmounting a roof of good thick slating, is far more effective than an elaborately-panelled stack rising from a covering of the flimsy character of which we have now too much in the market.

In the earlier part of this century there was a great abuse of stucco and Roman cement, which were used in situations quite unfit to endure the action of the weather and the test of time. Fluted Corinthian columns, with their base mouldings and capitals and other enrichments, were constantly executed in these materials, so much so as to have provoked a pasquinade aimed at George IV., in travesty of the compliment paid to Augustus for having found Rome brick and left it marble:

> Our George he did the same, but did it faster;
> For he found London brick, and left it plaster.

This skit, and the stronger artillery used by A. W. N. Pugin in his *Contrasts* and other writings, brought in the desire for more truthful materials, and plaster had to retire from the field in all works of any character, or at least to the more congenial atmosphere of interiors. The reaction against stucco, however, was carried to such a degree that it has been dispossessed of even its legitimate field, that of clothing plain brick or rubble walls, for which it was frequently used by the Greeks, the Romans, by the great architects of the Italian revival, and constantly in Mediæval works—for instance, by William of Wykeham—as an external coating of flint-walls. Plaster surfaces should indeed never be used so as to pretend to be anything different from what they are; they should only be employed when desired to cover rubble or uneven brickwork, and when so treated should not be blocked in imitation of ashlar masonry. For the use of plaster-work so restricted the architect will have a good argument to offer, drawn both from reason and authority. To the complete oscillation of the pendulum of fashion away from the over-use of stucco, I attribute a great mistake which has often been made in church restoration, in which we too frequently find that the rubble walls of the interior have been denuded of their original coating of plaster, a covering which in ancient times was frequently adorned with frescoes, and which might very properly be so treated now; and the walls so exposed exhibit a very forbidding aspect of confused pointing and general untidiness. But pray consider that, whilst I am calling your attention to the one legitimate use of this material, namely, stucco, I wish to object as strongly as any one possibly can against its improper employment. Let everything which has to endure strain and pressure or the searching of the elements be of better material, as well as everything that is to show the hand of the artificer in carved or moulded work; the latter had better be left out altogether than be displayed, in external work at any rate, as mere cast repetitions. I do not include terra-cotta in this general condemnation. It is not a new material, though its extremely fashionable (and I might add hackneyed) use is comparatively new. The objection to the mechanical repetition so disagreeable in plaster enrichments does not apply so strongly in terra-cotta, because in the kiln a certain amount of variety is produced, and therefore both on this ground and because of its greater durability it is much freer from objection; but I consider that it should be used with greater reserve than it often is, and with more consideration for the fitness of the material

with which it is to be associated. It may combine with an exterior otherwise mainly brick with excellent effect as a superior quality of the same nature. The old houses at East Basham, Norfolk, and Sutton Manor, near Ripley, in Surrey, are good examples of this kind. I do not think, however, it should be used in combination with rubble or flint walling; and I think also that it is out of place when the general effect is supposed to be of masonry, but with terra-cotta simply substituted for stone. It is, however, in the proper employment of steel and iron where chiefly the new materials demand exercise of thought; and this question becomes every year more prominent. Iron has become admirably useful, and is constantly employed as a concealed material; but the time must come before long when for some classes of building it will have to take its own place in architecture; and the best way to meet this requirement may very fitly occupy the thoughts of the rising generation of architects. I do not pretend to have any practical suggestions to offer—I have never had to grapple with the problem. I am inclined to think that the proper treatment of shop-fronts will bring about the solution; for there is now a marked contention between the ground storey, where every possible square foot of plate-glass is demanded, and the more usual and quasi-domestic character of the superstructure. Nothing is more dreadful in appearance than the façades which we often see with a display of solid architecture, where the Orders and pedimented windows seem to rest, as if by magic, upon the surface of plate-glass which occupies the whole breadth of the front at the street level. In this contention the shop-front must, I think, carry the day, and the old-fashioned form of the upper storeys will have to yield. How this is to be done I do not venture to advise, but it will, I believe, rest with you, Gentlemen—our successors and, as I hope, successful future Fellows of the Institute—to work out the desired result. This you will achieve by using building materials in the most natural way; truth of construction will then produce a satisfactory result, if directed by the intelligence which grows from proper study and by a feeling for proportion.

DRAWINGS BY THE OLD MASTERS IN ARCHITECTURE.

The Institute has recently received in trust, through the liberality of the Duke of Devonshire, a fine collection of drawings by some of the old masters in architecture. I think it may be of advantage, for the purpose of directing still further your attention to them, to give a running description of some of these. There are several portfolios containing drawings by Palladio, the greater number of which seem to be authentic works by his own hand. There are also some by Vignola and some by Inigo Jones: all these deserve your attention. Palladio's drawings mainly consist of a very complete series of the ancient remains existing in Rome in the middle of the sixteenth century, and particularly those of the Baths. What I chiefly wish to remark upon is the style of drawing in these works.

The buildings are all carefully planned with a good supply of the leading dimensions. The principal lines only—including, however, everything of importance with reference to the general masses—are shown. There is no confusion. Soffits are never indicated by dotted lines. In the elevations and sections, tints, usually brown, perhaps sepia, are frequently used to denote shadows and recesses—pen-hatching more rarely, but, whenever used, very lightly drawn, so as not to obscure outlines. Where the scale admits, columns and entablatures are carefully drawn, and great pains must have been taken to insure the exactness of the proportions. The capitals and bases of columns are very cleverly indicated, so as to suggest roundness in mere outline. Drawings of the Baths of Antoninus show some admirably drawn columns and entablatures to a good scale, and full detail of enrichments, with measurements and plumbs (in fact, complete working drawings); but there is no aim at picturesque effect. They are exactly what a carver would wish to have.

There are also drawings of buildings designed by Palladio, some, no doubt, by his own hand, treated exactly as the drawings of Roman remains previously mentioned; but there are some drawn more mechanically. Amongst the latter are some made for the cloister of the "Convento di Carita da Andrea Palladio, Architetto, par Antonio Vesentini "Veneto."

The Chiericati Palace at Vicenza is well represented and accurately drawn. The angle columns—according to Vitruvius's rule, which must have been derived from Greek practice—are slightly larger in diameter than the intermediate columns. The somewhat unusual feature of impenetrating columns, which strengthen the angles of the front projection, has a Classical prototype—viz. at Brescia, and also in the lately discovered basilica at Lincoln and in some Romano-Greek examples in Asia Minor. The proportions of the Chiericati Palace are very refined, and I remember finding that in drawing it, it demanded as much exactitude as a Greek temple to convey any adequate idea of its character. There is in the same portfolio a rather rough elevation of the Valmarina Palace at Vicenza. Here I will make a short digression from my main subject to observe that the beauty of this design is little understood from a mere elevation, because all the strength seems given to the centre, and nothing but weakness to the angles. Fergusson, in his *History of Modern Architecture*, criticises this design severely: "The angles, instead of being strengthened either by being brought forward or "rusticated, are weakened by having two more storeys of windows inserted, and instead of "repeating one of the pilasters which encumber the centre, we have only a detached statue to "support the great cornice, thus adding absurdity to weakness. We find, in short, in this "design ornamentation entirely divorced from construction." I am inclined fully to believe that any architect who knows this building only on paper, in the published designs, or indeed in this very portfolio, must agree more or less with Fergusson; but it is a different thing when the palace itself is seen at Vicenza. The street in which the palace is built forms an internal angle at each end of the front, and the houses on each side of the front abut solidly against these extremities, giving to each of the statues the effect of being placed in a kind of niche, so that they have a very different meaning in reality from what they seem to have when the design is looked at as of a detached building.

There are, further, a few drawings by Vignola, which are well worth your attention. They are both highly artistic and practical. All is good explanatory drawing, and without any tricks of effect. Palladio's drawings have the same practical merits, but a higher artistic quality. If the executed buildings of the two are compared, Vignola will be found quite to hold his own. Many years ago I saw at Bologna an interesting collection of drawings by several noted Italian architects of the sixteenth century (about 1560), being competition drawings for a west front for San Petronio. Among the designs were two by Palladio and one by Vignola. I find, by a note made at that time, that I thought the draughtsmanship of Vignola much the more artistic of the two great rivals.

With the Vignola drawings are some by Inigo Jones, for the most part more sketchy than the drawings by the two Italians above spoken of, but a few are excellent specimens of draughtsmanship. I particularly refer to a finished drawing of Inigo Jones's famous Watergate, outlined in pen-and-ink, and slightly shaded by hatched work. This drawing is well worth the attention of those who prefer that style of treatment; but the Italian architects chiefly relied on a rather slight shading in monotint, which I must consider less likely to confuse the form of the outline than pen-and-ink hatching.* There are several highly

* Some exceedingly valuable criticism on the imperfections too often attending this manner of drawing was given in the Review of the Students' Work in January 1893 [see *The R.I.B.A. Journal*, N.S., Vol. IX. p. 146].—F. C. P.

finished drawings by Kent well worth examining. They are most carefully drawn and shaded —rather too deeply, I think—in monochrome.

MONSIEUR CHEDANNE'S DRAWINGS.

I have now the pleasure of referring to the magnificent collection of drawings illustrative of the Pantheon at Rome, by M. Chedanne, which has been so graciously lent to us for this occasion by the French Government, and of which we are looking forward to a description this evening by M. Chedanne, to whom we are most glad to offer hands of fellowship, and are not unmindful of the sacrifice of personal comfort he has made for us in coming over at this season of the year. Into the interesting historical and archæological points illustrated in these drawings I do not propose to enter—it would be foreign to the purpose of my Address.

What I do wish to call to your attention is the wonderful elaboration and refinement of finish in these drawings, and the pains which must have been taken to ascertain, and accurately, as well as artistically, delineate the mass of valuable detail he has collected. I feel sure that these drawings will hold a high place amongst the works of the *Grand Prix de Rome* Students; but it is important for us to remember that almost every year works worthy of being collocated with these are produced in France. Our best draughtsmen will be the first to recognise that we in England have nothing comparable to them. It is perfectly true that our architectural education does not lead us to aspire to draughtsmanship of such perfection, and there is nothing in this country parallel to the encouragement given to it by the French Government in these Studentships. It is, moreover, in France the growth of many years of emulation; for I well remember the perfection of the French architectural drawings fifty years ago. Although, however, I do not think that, considering our methods of education and our requirements, we should be justified in urging our students to attempt rivalry with such works as we see here to-night, it is well worth the attention of those who wish to improve their draughtsmanship, beyond the utilitarian limit, to examine well M. Chedanne's drawings for the sake of their stimulating effect. The drawings which it seems to me will be of the greatest benefit to our students are the fine outline drawings, such as Nos. 21, 23, and 30. But from the exquisitely shaded works, such as Nos. 4, 6, 9, 10, and 11, there must be many valuable hints to be obtained. The very creditable drawings in outline by some of our students this year assures me that they, at least, will not examine M. Chedanne's drawings without profit. Extraordinary indeed is the difference between Palladio's simple handwork and these finished drawings. A sound, practical *via media* between the two seems not to be unattainable by us, which if we can reach—as I hope we may—the kind courtesy of our French contemporaries will not have been lost upon us.

REVIEW OF THE WORK SUBMITTED FOR THE PRIZES AND STUDENTSHIPS 1895. By J. M. BRYDON [*F.*].

GENTLEMEN,—

FOLLOWING a custom which has now become almost an established tradition, it has again been considered advisable that some review of the work submitted for the year's Prizes and Studentships should be placed before you this evening. The Council have been good enough to depute this duty to me; and, while acknowledging the honour, let me say that I deem it a great privilege in being thus afforded the opportunity of saying a few words of encouragement, and, may I hope, of instruction, to our younger members. At the same time, I am fully aware how delicate a matter it is to criticise architectural work in the presence

of architects—possibly even of its authors. There are so many different points of view, so many varied ideas, as to the form such work should take, and how it should be carried out, that perhaps I may be pardoned if I approach the subject with some little diffidence. You know the common saying, almost the common refuge of the critic, "'Tis all a matter of taste;" but it is not so much a matter of taste as a matter of knowledge. Without knowledge—that is, a cultivated taste—the critic's views may be worth but little. On one point, however, I apprehend we are all agreed: the essential value of such work as that entailed in competing for the now numerous Prizes and Studentships annually offered by the Royal Institute—and in this agreement none would seem to join more cordially than the young men themselves; for never before, I understand, has it called forth such a liberal, and such a generally intelligent response. Whether it is, as I hope, that the value of these competitions, especially that of the Travelling Studentships, is becoming more highly appreciated year by year, or that the subjects are more than usually attractive, the result is very gratifying and encouraging—gratifying that the prizes founded in hope have brought forth such good fruit, and encouraging for the future prospects of the art we love. It is a great gratification also to be able to remind you that, through the generosity of Mr. Aldwinckle [*F.*], another Studentship—for travel in Spain—will be open for competition for the next three years, under such regulations as the Council may think advisable.

The artistic work of the year may be considered under two main divisions, viz.—Studies of Ancient Buildings, and Original Designs. Let us take them in their order.

STUDIES OF ANCIENT BUILDINGS.

The wisest of men truly said, "Wisdom is the principal thing," and "With all thy "getting, get understanding." Now he that would practise architecture must first understand it, and there is no better road to the root of the whole matter than the diligent study of old work. Moreover, as a part of the procedure, I know of nothing more valuable than making careful measured drawings of important buildings. In this way is gathered not only the letter, but, what is far more essential, the spirit of the work. In this way the great Italian artists of the fifteenth and sixteenth centuries, studying the classical remains of ancient Rome, were able to produce the mighty works of the Renaissance. In this manner is learned the grammar of the noble language in which you are afterwards to clothe your sermons in stones. This being so, it is not surprising that for the Measured Drawings Medal there should be seven competitors. Of the sets submitted, those of the Gateway of St. John's College, Cambridge, by Mr. W. H. Ward [*A.*], under the motto "Lady Margaret," are unquestionably the best; they are carefully measured and clearly drawn with firm lines, in a broad, simple style, quite expressive of the subject, and the details show both feeling and understanding. Those of Llandaff Cathedral, by Mr. J. H. James ("Earendel"), make a good second; but they lack the precision and style of drawing so conspicuous in Mr. Ward's.

In this connection may I echo the hope expressed by Mr. Graham last year, that the copies of measured drawings deposited in the Library of the Institute from time to time, in fulfilment of the terms of this competition, be classified and made more accessible for reference and study? It is a suggestion fraught with such value that I trust means may soon be found for carrying it out. Permit me also another suggestion. Considering the work involved in properly measuring up buildings, work in itself essential from an educational point of view, it seems to me that the honorarium attached to the Medal is rather inadequate for the purpose, and I therefore submit for the consideration of the Council whether it would not be advisable to increase the amount to twenty guineas.

For the Pugin Studentship there are seven candidates, and for the Owen Jones there

are two. For the former nothing could well be more beautiful than the drawings submitted by Mr. A. J. Dunn, more especially those of the sedilia in All Saints' Church, Howton, Notts, and the Vicar's Chapel at Wells. The drawing of the sculpture and carving on the sedilia is specially noteworthy for its truth and expression, full of the spirit of Mediævalism in every line. He thoroughly deserves the Studentship, and one looks forward with more than usual interest to the result of his travels in the United Kingdom. Mr. Inglis's drawings are also very good indeed, though not of the surpassing merit of those placed first. Some err, however, in sending too many merely pretty sketches. Now that is just what is not wanted. Architectural drawing is a conventional business altogether, and must be represented conventionally by plans, elevations, and sections. Carefully measured, carefully drawn studies of old work of the best periods are worth any number of sketches; and I may add that where it is possible to give the colour of the materials, such as brick, or stone, or timber, it should invariably be done. It not only increases the interest and value of the record, but helps one to understand the methods of design and the expression of the building accordingly.

Of the two sets submitted for the Owen Jones Studentship it has been very difficult to decide between them; both are alike excellent in their different styles. Of the two I am not sure that I do not prefer the drawings of Sant' Anastasia, Verona, by Mr. Corlette [A.], as practical working drawings of colour applied to decoration. They are clear and vigorous, and apparently give us the actual tones of the colours themselves, and not an impression of them. At the same time nothing could well be more delicate than Mr. Joass's studies in the Norfolk and Suffolk churches, so famous for their coloured decoration. Both sets, however, are excellent examples of the kind of work required. I wish I could say something that would impress on you the importance of this Studentship, and of the value of colour in our buildings. It is a little disappointing to find so few candidates for what ought to be one of the most attractive in the list. Last year there were only two, and no award was made; this year is certainly an improvement in quality if not in quantity. I know it probably entails some special gift for, or love of, colour for its own sake. I know, also, that it requires more than usual application in its study. You may remember what Ruskin said of the wonderful painting by Paul Veronese in the Sala del Collegio of the Ducal Palace at Venice—"The traveller who really "loves painting ought to get leave to come to this room whenever he chooses, and should pass "the summer mornings there again and again. He will not otherwise enter so deeply into "the heart of Venice." And he is right. It must be studied "again and again": in no other way can you gain the secret of colour. Is it a vain hope that through the medium of this Studentship, or others like it, there may yet be cultivated a knowledge of the true principles and practice of coloured decoration in conjunction with architecture which may in time lay the foundations of a school of decorative art known and read of all men? Never, perhaps, has there been a time when so many public buildings were being erected all over our land. I do not mean great monumental works—they come but few and far between—but for the ordinary requirements of municipalities—county halls, libraries, schools, and so forth; they are designed and carried out with more or less care and cultivation, and there, so far as the architect is concerned, it often ends. When their walls and ceilings, their domes and corridors, come to be decorated, the artist who understands painting—especially figure subjects as applied to architectural interiors—as it was understood and practised by the men who adorned the Renaissance palaces, does not yet exist. To encourage his development, to instil into his mind that there is a higher and nobler method of decorating our buildings than merely by easel pictures, is the object of the Owen Jones Studentship.

Before leaving the subject of studies of old work I would refer for a few minutes to the magnificent drawings of the Pantheon at Rome by M. Chedanne. We have to acknowledge

the courtesy of the French Government, and of M. Chedanne himself, for the opportunity of inspecting those wonderful designs, which for beauty of draughtsmanship, for accuracy of delineation of the existing structure, and for the knowledge displayed in its restoration, have probably never been surpassed. They must be a revelation to many of us as to the possibilities of measured drawings. As the work of a Travelling Student they are perfectly astounding; an object-lesson of the highest value of what to study and how to do it—not only architecturally but archæologically, for I understand that M. Chedanne in the course of his work has made discoveries of design and construction of the greatest interest, which go far to set at rest the history of that wonderful fane—

> Simple, austere, sublime,
> Shrine of all saints, temple of all Gods,
> From Jove to Jesus.

As one looks through the series, the question arises how best to turn the lesson to account. We have no prize like the Prix de Rome, which keeps its fortunate winner for four years at the Villa Medici; but in the six months of the Soane, for instance—would it were longer!—might it not be an instruction to its holders to study and map out, as completely as the time will allow, the whole or a part of some famous example of ancient art, and, returning, read a Paper thereon with their drawings for illustrations, instead of dividing up the time over a number of subjects supposed to be more or less serviceable in after life? I submit the matter to the consideration of our future students. With such work as M. Chedanne's before their eyes, there should be no lack of enthusiasm to follow his splendid example.

ORIGINAL DESIGNS.

The prizes for original design have brought forth an unusual number of competitors—eighteen for the Soane Medallion, eleven for the Tite Certificate, and eight for the Grissell Medal. Perhaps, as I have said, the subjects were more than usually attractive; perhaps the Travelling Studentships are becoming more highly appreciated. Be that as it may, the result is encouraging in every sense of the word. For the Soane—the Blue Ribbon of the Institute—the subject, a Gallery for Pictures and Sculpture, is specially interesting: on a site, too, open all round, with no questions of light or air or party-walls, no complications of plan, no sanitary requirements worth mentioning, and no limit of cost. Truly it is an ideal problem! For what does it really mean? A palace dedicated to all the arts, a shrine by Architecture for her sisters Painting and Sculpture. What visions of artistic beauty does the very proposal not conjure up! No wonder we have so many candidates striving for victory; the regret is that it should be but academic. Consider for a moment the possibilities of the subject: a stately building of noble mien, its wall-surfaces broadly and simply treated, with striking opportunities for the combination of sculpture and architecture, a dignified entrance, a grand staircase approached through a magnificent hall, and leading to a noble series of galleries with splendid vistas from end to end, their walls enriched with the masterpieces of many lands, interspersed with costly marbles lovely in form and rich in colour. The imagination revels in the poetry of the situation, as the historic palaces of the Renaissance float through the mind, and one begins to feel that a rival to any of them is within one's reach. All one's knowledge of proportion, all one's feeling for detail, all one's intention and expression of plan and design, is called into existence for the fair apportionment and embellishment of wall and of window, of column and of cornice, till its development becomes a positive delight and its accomplishment a triumph of art, for art's own sake. What may one not expect from our young artists as the answer to such a glorious proposal! That at least the competition shall

be above the average. And to their credit, be it said, it is quite above the average. There are fewer eccentricities and more really satisfactory designs than have been seen in the Soane for some time past. True there are some which do not come within measurable distance of what is really wanted; but, on the other hand, there are more of a high order of merit, which ran each other so close for first place that it was a matter of more than ordinary difficulty to award the palm.

But let me be frank as well as favourable. Though there are many points of excellence scattered throughout the whole, not one of them comes up to the ideal palace. Perhaps this was hardly to be expected; the ideal is difficult of attainment; there are evidences also of the influence of the special, not to say questionable, features of some recent buildings which a little more thought or a little more knowledge would have avoided. For example, we seem to have entered on a craze for rustication as a decorative treatment. Well, we may be none the worse for that; but, as I had occasion recently to point out in the studio of the Architectural Association, there is a use and an abuse of rustication. When a column becomes so oppressed with it to the extent shown in the design marked "Scallywag," it ceases to be a column at all, and becomes a square pier, with deep markings across it at intervals. Now this is an abuse of the motive; the original feature is lost in its accessories, and may as well not be there at all. Another weakness is the craving after towers. Now a tower is primarily intended for a clock and bells, which are not primarily necessary in an art gallery, more especially when they do not grow naturally out of the plan, but are evidently introduced for their own sakes as purely decorative features. Domes also, though perhaps more appropriate, may be overdone, as in the case of the design with two, and they of quite different character, so that any repose to be obtained from the repetition is lost in the variety. These, however, may be charitably set down to the exuberances of youth. To inexperience also may be set down the points that are lost in the planning: hardly any one has fully grasped the possibilities of the staircase as a great internal feature. When one thinks of what Michael Angelo has done with simple means at the Laurentian Library in Florence, or the noble staircases of the Genoese palaces, one sighs to think of the opportunities lost in these Soane designs. Again, what could be more impressive than a stately hall adorned with sculpture as an approach to the grand staircase? But we almost look in vain for such; or what more imposing than the vista of gallery after gallery, communicating by handsome openings? In several of the plans this has apparently been forgotten, or never thought of, and we are left to look only from one room to another. The masters of the Renaissance understood the effect to be gained by an architectural plan better than this; their plans are well worth studying for the advantage they took of all these important points, and many others besides. Suffer me to commend them to future candidates for the Soane.

It is more pleasant, however, to praise than to blame, and most heartily do I congratulate Mr. H. S. East [*A.*] on his winning this important prize, the more so as he hails from beneath the Southern Cross. "Advance, Australia!" by all means; it is at such a moment we feel members of one common brotherhood of kindred as of art, and proud of the colonies who send their sons to share honours with the mother country. Taking its merits all round, "Southern "Cross" has been adjudged the best design. It is not free from faults, for all that. The staircase, for instance, is too near the entrance; it is reached too early; the mind has not had time to appreciate its advent. Again, though the staircase with its dome above is good in itself, the steps are too narrow, their turnings and direction too complicated; much of the effect is thereby lost. Externally the dome would have gained in dignity had its lines been carried down to the ground; a slight projection of the central portico would have secured this, and probably a pediment over the upper Order increased its importance in this connection. The

rustication has, I am afraid, gone rather wild, the angle quoins and the courses of the niches being quite out of scale with each other; and they, again, with the dressings of the windows below them. On the other hand, the exterior lines are simple and dignified, and the detail full of character. The necessity for windows in the lower storey and none in the upper has doubtless perplexed the competitors considerably. Generally one of two treatments has been adopted for the upper storey: either it is a plain wall adorned with a band of sculpture, or it is enriched with niches and statues therein. I confess my preference for the former treatment, but in no case has it been boldly and successfully carried out. The sculpture is all on too small a scale, missing the sumptuousness of effect, as if it were something to be afraid of. One is surprised at such moderation when money was no object! "Southern Cross" has adopted the niche treatment; and, but for the want of harmony in scale I have mentioned above, the result is fairly satisfactory.

In "Lion's Head" (Mr. C. H. B. Quennell) the planning is the weak point, especially the ground floor, which is mainly given over to tea and coffee and packing-cases. The elevational treatment, both externally and internally, is full of interest, and shows much thought and invention; its detail also is often charming; and working with great restraint, its author gains thereby in dignity. Indeed, the design of the central portion of the façade is almost too simple; the upper windows might have been more enriched with advantage. "Lion's Head" adopts the sculptured frieze for the upper portion of his walls; but it is on far too small a scale: it is overpowered by the architectural surroundings. Were he to revise his design, I think on second thoughts the tower would probably be omitted. Of the other designs, "Scallywag" and "Westward Ho" have good plans, but they fall away in elevation and in detail. Nevertheless, the former is quite worthy the honours it has won. Some are quite nondescript in style, notwithstanding one claims to be "English" and another "National Renaissance." Gentlemen, without desiring to curb your imagination, may I plead for more purity in style? Believe me, originality is not everything, especially when striven after for its own sake. Renaissance, English or otherwise, is not a medley. Of what country that named "National" is the home puzzles me entirely: perhaps it claims to belong to that fussy order of things with which we have seen some coquetting lately, and which some genius in a moment of inspiration dubbed Anglo-Spanish. Why Spanish, and what it has to do with England, Heaven only knows; but it is fervently to be hoped it will never become "National" here, where we have a priceless Renaissance of our very own. A word to the wise. Study *that*, and not the vagaries of the last decade of the nineteenth century.

From the Soane Palace of Art we come to the Pleasure Pavilion of the Tite; and on the cool waters of the lake row past the eleven claimants for the prize. Taken as a whole, they are as good as, if not indeed better than, the Soane. The subject is quite as attractive, especially for those who love the Upper Thames. The requirements are few, the conditions easy, and money, again, no object. Happy competitors! Not even a new and amended Building Act to live up to; but—ah! there is always a "but," otherwise the laurels would not be worth fighting for—the style must be in accordance with the principles laid down by Palladio, Vignola, Wren, or Chambers. Sir William Tite was wise in his generation for the benefit of ours and those that may follow: he was anxious to keep alive in England the study of Italian architecture. If you would win, therefore, you must know something of the principles on which those great men worked and wrote—Symmetry, Harmony, Proportion, and the greatest of these is Proportion. In their unity lies greatness in design; in their absence, feebleness. You need not be original; you need not be picturesque—though, of course, you may be both or either—but you must be proportionate, and how much we have

lost sight of this great principle needs little telling. Let me give you an instance—and this applies also to some of the Soane designs. I am no stickler for a rigid adherence to the letter of the five Orders as laid down by more than one of the men whose principles this prize is designed to perpetuate; but, unless you can materially improve upon them, any wayward departure for its own sake is hardly wise. Just now attenuated columns and pilasters—Ionic for choice—seem to be particularly fashionable; and by way of contrast to their meagre shafts they are made to carry an entablature quite a third or more of their own height. The result is in such bad proportion artistically that the shafts look as if they would break down under the superincumbent weight. The entablature also has great liberties taken with it; the frieze is abnormally enlarged, and the architrave starved, or left out altogether. In one case both frieze and architrave are dispensed with, and the cornice sits comfortably on top of the capitals—alone in its glory. The intention of the mouldings that form the cornice is also strangely misunderstood, and we find a cluster of puny members in juxtaposition with others—by comparison—of gigantic size, out of all relation the one with the other; while a pediment is nothing now unless it is either broken or has a subsidiary one to assist it. Now all this may be new—but it is not true; therefore, if you would be true, strive less after the new. But, in saying this, pray do not let me be misunderstood. I repeat, I have no desire to restrain your invention—only to beg you to curb your exuberance. Were some of the great men of the sixteenth and seventeenth centuries to revisit us in these last days of the nineteenth, and learn the object of this prize for which you have been contending, I think there can be little doubt but that they would pray for the repose of the soul of Sir William Tite!

After these general remarks, I do not propose to enlarge very much on the details of any particular design. It seems to me the tendency has been to overdo the size of the building. Some are more like villas than pavilions, though some, again, have caught the true spirit of the subject. Such, for instance, as "Luctor," by Mr. Shekleton Balfour [*A.*], which has fairly earned first place; "Il Gondoliere" (Mr. Banister F. Fletcher [*A.*]); "Kismet" (Mr. Kennedy [*A.*]), and "Jonah" (Mr. Conner [*A.*]). In their own ways they are clever, well-thought-out designs, nicely drawn and detailed. "Luctor" and "Il Gondoliere" are specially good internally, and the loggias are just the places to while away an idle hour in pleasant chat before or after a spin on the lake. If they have a fault, they rather run to domes, though "Il Gondoliere," by Mr. Fletcher, offends less in this respect than the others.

For the Grissell Medal there are no fewer than eight competitors. Some of them have strained the conditions somewhat by showing staircases passing through two floors instead of one; others, again, are octagon instead of spiral. They are all more or less fussy in design, and some are doubtful in construction—so much so that the Medal has been withheld, and the money prize only awarded to "Quercus," by Mr. J. H. Fogerty [*A.*]. This is a matter for regret, as nothing can be more useful than a Study in Design and Construction.

THE ESSAYS.

It is a pleasure to bring these remarks to a close with words of unqualified praise. Not for many years past have the essays attained such a high standard of literary excellence. This is just as it should be when the subject is "The Influence of Literature on Architectural "Development"—a fascinating theme truly, when we think how much the rise of the Renaissance was due to the spread of classical literature during the first half of the fifteenth century, and of the influence of the works of Sir Walter Scott on the Gothic revival in our country. It is most gratifying to find that out of the eight essays submitted four of them are quite in the front rank, displaying not only high literary merit, but, in common with the rest, an amount of thought and research worthy of all praise. Of these four, that bearing the motto "Bid

"me Discourse," by Mr. Arthur Thomas Bolton [*A.*], Soane Medallist for 1893, has been awarded the Silver Medal and Twenty-five Guineas; and "Craigside," by Mr. Geo. T. Sutcliffe [*A.*] the second place, with a prize of Ten Guineas; while "Research," by Mr. J. Humphreys Jones, B.A. [*A.*], and "Ye Skeptic," by Mr. Alfred C. Houston [*A.*], Ashpitel Prizeman for 1892, have each received Honourable Mention. May we hope the high standard attained this year will be maintained, and that the study of general literature, as bearing upon architecture and the allied arts, will never fail to find its votaries in our ranks?

Most heartily do I congratulate the Institute on the success that has attended these competitions this year, and the various prize-takers on the rewards they have so honourably won. To the unsuccessful, one word of encouragement: Persevere in your good work; success comes with experience and practice; he who follows me in this friendly duty may yet have the pleasure of congratulating some of you on the attainment of your desires. It is better, in such competitive warfare as this, to have fought and lost than never to have fought at all.

MONSIEUR CHEDANNE'S DRAWINGS OF THE PANTHEON, ROME.

SUMMARY OF HIS REPORT TO THE ACADÉMIE DES BEAUX-ARTS (INSTITUT DE FRANCE). By R. Phené Spiers [*F.*], F.S.A.

Mr. President and Gentlemen,—M. Chedanne has been kind enough to place in my hands the report which he submitted to the Académie des Beaux-Arts, in conjunction with the magnificent series of drawings which are now exhibited in the galleries downstairs, in explanation of the special researches which he was enabled to make by the permission of the Italian Government and of his hypothetical restorations. I have been asked to write a *résumé* of this Report, as it would be impossible to give a translation in full owing to the short time at our disposal. Broadly speaking, the report includes two distinguishing elements: first, that which cites in detail the various references to the Pantheon by writers of all periods, and in which, from time to time, M. Chedanne combats the various theories which have been put forward as to its construction; and secondly, that which describes in detail M. Chedanne's own researches, and the discoveries which he was able to make in consequence of special facilities granted to him by the Italian Government. The latter are given in so concise a manner that I have felt they would lose much of their importance if I attempted to curtail them; and as this is, perhaps, the only opportunity you will have of testing the accuracy of M. Chedanne's contentions by an examination of the drawings, I have come to the conclusion that my best course will be to confine my attention to them this evening, leaving the historical part for a future article in the Journal, if thought desirable. M. Chedanne says:—

Before commencing the work of restoration, I had already noted, when measuring the plan, that the axes of the small altars, which form the chief elements of the interior decoration, and those of the semicircular recesses (formed in the thickness of the wall), were in the same line. This fact was of great importance, as it gave me an absolute proof that the builder of the edifice was also its decorator. My researches commenced at the springing of the vault above one of the four rectangular chapels. On the removal of the stucco decoration of three coffers of the lower range, three small arches were exposed, whose springing was vertically over the columns of the ground floor, whilst that of the greater arch, which enclosed them, rested on the piers on each side. The surface of the bricks proved that these small arches had been built in, to accord with the design of the coffer, and not cut afterwards, as might have been supposed. A hole which I was enabled to cut at a higher level opposite the top of the greater arch *showed this arch to be vertical*. This at once disproved the hypothesis of Piranesi, that this greater arch formed part of a series which constituted the outer skin of the cupola. Further

examination also disproved the assumption that the dome of the Pantheon was constructed in light porous stone and pottery, and would not be able to carry the bronze flower-bosses in the centre of the coffers and on the ribs, as I found bronze cramps built into the solid vault to carry these features. The whole vault is, in fact, built in solid brick, and is supported at its springing by the great vertical arches already referred to, which are carried through the thickness of the wall, rising outside to the top of the circular wall of the building. The removal of some of the bricks of the small arches referred to was facilitated by the fact that certain grave cracks had displayed themselves in the vault, which necessitated their restoration. These cracks were the result of an unfortunate restoration made in the attic storey by the architect Posi in 1747. Posi, who was the architect of Benedict XIV., cut through the discharging arches immediately over the columns of the ground storey in order to increase the size of his niches, and it is in the vault above this that the cracks have developed.

In order to explain more fully M. Chedanne's arguments, I may be allowed here to point out that the Report from which I have quoted was that submitted in June 1892. Since that time the question of the real construction of the whole building has occupied M. Chedanne's continued attention, and it will, I hope, appear some day in a monograph on the subject. In the course of a long discussion which I had with him on Saturday, I ascertained that the whole of the rotunda is built in brick with a facing of "*opus reticulatum*." This was afterwards faced with marble, the conjectural restoration of which is shown in Drawing No. 21. The bricks which form the core were of irregular shape, bedded in mortar, and grouted at various levels, with occasional beds of the two-foot bricks carried through the thickness of the wall as a bond. The whole thickness of the vault is also built in brick laid in horizontal beds, at all events up to the level of the fourth range of coffers, as ascertained by M. Chedanne; the same horizontal bedding of the bricks also being found in the proximity of the central opening in the vault.* This throws altogether a new light on the construction, and although it bears out the theory put forward by Professor Middleton, that *the whole vault is solid, and exerts no thrust*, it is due to a totally different cause—viz. the horizontal bedding of the bricks of the vault, and not to the cohesive properties of the concrete mass of which it was supposed to be composed. The reference made to the springing of the small arches in the vault, and their position exactly over the columns of the ground storey, emphasises M. Chedanne's argument, that the decoration formed part of the original and main construction, and that the columns in question, which have been assumed by most writers to be decorative features, and added at a later period, form part of the integral construction of the rotunda. The numerous relieving arches which M. Chedanne shows in Drawings Nos. 15, 16, and 24, are all necessary constructive features in his estimation, and the cutting through of some of them by Posi in 1747 led to cracks in the superstructure.

The removal of some of the bricks from the main vault was facilitated by the cracks already existing there, and it was not without astonishment that I noted they were stamped with dies known to be of the time of Hadrian, and of the probable date of 123 A.D.

The stamps to which he refers are those shown, full size, in Drawing No. 12, being Nos. 1, 2, and 3 respectively, the two latter being found on bricks removed from the small arches, the first from that in the greater arch. The discovery of these stamps on the bricks in the vault naturally led to a desire to examine those in other parts of the structure, and M. Chedanne accordingly obtained permission to search elsewhere. On this drawing, No. 12, eight stamps are shown: the first three referred to, and five others which are copied from

* M. Chedanne was unable to examine the vault between the fourth coffer and the central opening; but he is of opinion that a range of arches was built on a centering at this level, where the diameter is reduced to about 80 ft. The horizontal beds are not quite horizontal: they slope down outwards 4 centimetres to a mètre.—R. P. S.

bricks taken out of, No. 4, the arch above the great chapels; No. 5, the relieving arch over the columns; No. 6, the circular wall and stairs; No. 7, the foundations of the circular wall; and No. 8, from the main drain under the pavement of the interior, which carries off the rain falling through the central opening in the vault.

The result of this discovery, which is by far the most important made by M. Chedanne, not only enabled him to decide that the whole of the rotunda was built by Hadrian, but led to a series of researches respecting the famous portico of Agrippa, on which subject M. Chedanne continues:—

The existing portico: was it the original portico, against which the rotunda, with its brick projection (*avant-corps*) on south side, had been built? Till within recent times this portico has always been looked upon as an addition made by Agrippa to shelter the statue of Augustus and his own, which the Emperor forbade him to place in the interior of the temple by the sides of those of the Cæsars. Its composition and plan were regarded as a confirmation of the writings of Dion Cassius, which forms nearly always the starting-point of studies relating to the Pantheon.

Again, the design of the portico itself has occasionally been criticised adversely by competent authorities, who have also pointed out the clumsy way in which part of it is built into the projecting brickwork of the rotunda. This defect has been condoned by the remark that it was in consequence of its being an addition. The excuse, however, will not hold good, for on careful examination of the construction it is easy to see by the bond of the courses, the projection of cornices, the brick bonding courses, and the setting back of the exterior wall-surface of the circular wall *that the rotunda, with its brick projection* (*avant-corps*), *and the portico were built at the same time.* That which surprised me the most, however, in my study of the work was the absence of any suggestion as to the numerous defects which constitute the clearest proof that the existing portico is *a reconstruction long posterior to the age of Augustus.*

In support of this argument M. Chedanne says:—

The modillions of the cornice of the pediment are not equally spaced out—the decorated mouldings under them are cut irregularly by the existing joints—the bases and capitals of the pilasters inside the portico intersect in a clumsy way, not always being on the same level. And, finally, the right hand return of the portico is not quite at right angles with the principal front.

Besides these minor details, the proportions themselves of the pediment afford an unmistakable evidence that the existing portico was built of features taken from an earlier edifice. The height of the pediment is a little more than a quarter of the width of the front—a proportion satisfactory in a tetrastyle portico like that at Pola, but quite inadmissible, according to Vitruvian rules, in an octastyle portico.

M. Chedanne then proceeds to give the reasons for his hypothesis that the original portico of Agrippa was decastyle. He was led to this hypothesis by a singular discovery he made when measuring the cornice of the pediment, the modillions of which he found were *not vertical*, but inclined at an angle of ·0146 metre in their height, which is ·24 metre.

M. Chedanne points out that of the original portico there exist in the present one:—(1) The columns, which retain their original intercolumniation; (2) the entablature, with the famous inscription; (3) the cornice of the pediment, with the exception of a portion on the left-hand side (including five modillions), which was restored under Urban VIII. (1623). The intercolumniation is $2\frac{1}{4}$ of the diameter, nearly the same as that of the Temple of Venus and Rome in Rome, and of the Temple of the Sun at Baalbek, both decastyle temples.

M. Chedanne calculates that the correct proportion for a pediment of a decastyle portico would be one-sixth of the width of the same. The inclination of the modillions of the existing pediment is exactly that which would arise if a portion of a cornice of a decastyle portico with vertical modillions were utilised, as it is suggested to have been in the existing portico. The left-hand angle of the pediment was restored; the right-hand angle is broken away; there

remained only the summit to be examined. It was necessary that a new block of stone should be cut to fit the older portions of cornice used up *with a raised pitch*, and here M. Chedanne found that the builder of Septimius Severus—to whom M. Chedanne attributes the raising and alteration of the portico from the decastyle to the octastyle example—showed his weakness. "He did not even take the trouble to space out equally the modillions on each side, and "the ornamental mouldings he carved under them are of the poorest kind."

These discoveries led M. Chedanne to pursue his investigations under the paving, and here he found on each side the original foundation wall, in travertine stone, of the extra column required to complete his decastyle front. This wall was carried back towards the north on the return sides as far as would allow of five columns resting on it; and on the west, or right-hand side, he discovered *in situ* a portion of the original base moulding of the podium (which returned again to the east), and a fragment of the marble facing. The paving on which this rested was 2·40 metres, or nearly 8 feet, below the pavement of the original temple, which was 2·10, or nearly 7 feet, below the actual pavement of the present rotunda. Continuing his examination of this foundation wall, which in the excellence of its construction belongs to the Augustan era, M. Chedanne noted that the additional courses of foundation which were added in the time of Septimius Severus were of inferior construction to those on which they rested. In Frame No. 10, downstairs, there is an admirable sketch of the fragment of the base of the podium just referred to.

Frame No. 13 shows a plan of the foundations and of the excavations made on the site, and on it, marked in blue, is one of the original foundation walls crossing the portico. This, having been raised, carries the row of columns running back from the front on the left-hand side. From this it would appear that, as at present, there were two intermediate rows of columns to carry the roof. In the existing portico the central span is about 36 feet wide between the columns, the two side spans about 22 feet; in the original portico they would be equal if the intercolumniations were constant.*

This same drawing, No. 13, shows also the position of the excavations made inside the Pantheon, some of which revealed the pavement of the original temple, 2·10 metres, or 6 feet 10 inches, under the actual pavement. The traces of this pavement are marked A on plan; and although one of the spots indicated might just come within the cella wall, if the return flanks of the decastyle portico had been carried through, the return of the foundation walls above referred to makes the hypothetical restoration of the original cella a difficult task, respecting which M. Chedanne reserves his inquiries.

I have only now to direct your attention specially to Drawing No. 4, in which M. Chedanne has shown the original bronze trusses which carried the roof of the portico, and which were taken from Peruzzi's drawings, made in 1627, before the bronze plates of this portico and all the trusses carrying the roof were taken away for the cannons of the fort of St. Angelo—the Baldacchino of St. Peter, which is supposed to have been cast with this material, is in Venetian bronze, and was cast, according to M. Chedanne, long before the demolition of the bronze trusses of the portico—and the hypothetical restoration of the bronze-plated circular ceiling over the central aisle of the portico.

M. Chedanne has further pointed out that Agrippa selected for the site of the Pantheon and for his Thermæ (which are in the immediate rear) the lower portions of the town, which, previous to his time, had virtually been a marsh. This site he was able to obtain at much less cost than elsewhere; and he drained it so effectually that it was not till a later period (when Hadrian commenced the Rotunda) that it was found necessary to raise the level. At the present day the Rotunda is occasionally flooded with water, and many of M. Chedanne's

* The central intercolumniation was occasionally wider.—R. P. S.

explorations had to be conducted with the water up to his waist. In a further explanation which M. Chedanne gave afterwards he believed that when Hadrian built the Rotunda he left the decastyle portico in its original position, and built the *avant-corps* against the portico, so that originally there must have been a flight of steps with the portico to reach the higher level. It was Septimius Severus who took down this decastyle portico and re-erected it as an octastyle one, as we now find it; and Caracalla continued Septimius Severus's work. The same is recorded on an inscription in two lines on the architrave below the inscription of Agrippa.

VOTE OF THANKS TO THE FRENCH GOVERNMENT.

THE PRESIDENT.—Gentlemen, it is my pleasant duty to ask you to record a Vote of Thanks to the French Government for the loan of these drawings which have been prepared by M. Chedanne. I consider it to be a very great kindness on their part to have answered so cordially our request, and that it is a very great advantage to the architects and artists of this country, and especially to the Institute, to have had these splendid works lent for our inspection. It is most important for us to see what can be done in the way of architectural delineation by the students of other countries, especially of France.

MR. E. W. MOUNTFORD [*F.*], President of the Architectural Association.—Mr. President and Gentlemen, as representing the Architectural Association, I am proud to have the honour of seconding the Vote of Thanks to the French Government. I can assure M. Chedanne that our Association is filled with enthusiastic admiration at the enormous labour, the great and patient research, the very considerable artistic power, required to produce such drawings. The marvellous care and precision with which the architecture is drawn, the able manner in which the sculpture is represented, and the delightful colouring of the whole, combine to make these drawings the most beautiful it has been my lot to see. I am afraid, Sir, it will be a long time before the architectural students of Paris have to propose a Vote of Thanks to our Government for the loan of any architectural drawings—the one point upon which British policy is invariably consistent and continuous being a determination to spend as little money as possible upon architecture, and to encourage the study of it in no way whatever. All the more, therefore, do we owe the French Government a very hearty Vote of Thanks for the loan of these drawings. And I think, Sir, we ought to include in the Vote of Thanks our confrère M. Chedanne for having made them, and our friend Mr. Brydon for having initiated the idea of obtaining them on loan from the French Government.

THE PRESIDENT.—Monsieur Chedanne, je m'empresse de vous informer que les Architectes Britanniques ont voté à l'unanimité leurs remercîments les plus cordiaux et respectueux au Gouvernement Français pour le prêt des dessins du Panthéon à Rome, dont vous, Monsieur, êtes le plus habile et le très-savant auteur.

MONSIEUR CHEDANNE.—Monsieur le Président, Messieurs, et chers Confrères, je suis profondément touché de votre accueil si bienveillant, et vous en remercie, non seulement en mon nom personnel, mais au nom de nos confrères français, dont je suis ici le très-modeste représentant. Vous avez bien voulu demander au Gouvernement Français, par l'intermédiaire de l'Académie des Beaux-Arts, communication d'une étude faite par un pensionnaire de Rome. La bonne chance a désigné celle que j'ai faite du Panthéon. Vos très-aimables paroles, ainsi que la sympathie que me témoigne l'Assemblée—surtout celle des jeunes architectes britanniques réunis ici ce soir—je les accepte pour notre École française, à laquelle je les porterai bientôt avec le plus grand plaisir.

The reception given by the members of the Institute and the numerous Students present to M. Chedanne's and the President's words, as well as to those of Mr. Mountford, was of the warmest description.

9, Conduit Street, London, W., 17 *January* 1895.

CHRONICLE.

THE PANTHEON OF ROME.

M. Chedanne's Delineation and Restoration.

The magnificent series of drawings of the Pantheon made by M. Chedanne during the fourth year of his sojourn in Rome were open to the public from Monday 7th inst. until Monday 14th inst., both days inclusive; and a large number of visitors, as well as members, have seen them. The drawings comprise plans, elevations, sections, and details of the existing Pantheon; a series of photographs of the excavations and of portions of the structure exposed during the restoration; a series of engravings of the Pantheon made at various periods; a collection of drawings and prints which have assisted M. Chedanne in his restoration; with plans, sections, elevation, and details of his conjectural restoration.

A detailed list of the drawings is given below. In Nos. 4, 20–23, M. Chedanne gives his conjectural restorations of the building in Hadrian's time. In No. 4 he suggests the bronze plating which was taken away by Urban VIII. in 1632, and melted down to supply the bronze for the canopy over the Apostles' Tomb in the Vatican. No. 13 shows the position of the older paving discovered, and the pavement outside the portico to the eastward. In No. 26 is suggested the original Portico of Agrippa.

1. Plan Général.—General block plan showing the remains of ancient buildings in the vicinity, including the Arch of Piety and the Baths of Agrippa and Alexander Severus.
2. Détails du Portique.—Detail of the Order of the Portico, with study of capital restored one-fifth full size.
3. Façade Principale—état actuel.—The front of the Pantheon as at present existing.
4. Étude générale de la Structure.—Isometrical section showing construction.
5. Coupe transversale—état actuel.—Cross-section of present building.
6. Ordre intérieur.—The Order of the Interior, one-fifth full-size.
7. Plan du Rez-de-Chaussée.—Plan of building showing pavement.
8. Coupe transversale—Construction.—Cross-section showing the construction.
9. Coupe longitudinale.—Longitudinal section through Portico and Rotunda.
10. Études variées.—Studies of various parts.
11. Étude de la Décoration.—Detail of bay of interior showing the marble decoration.
12. Corniches extérieures.—Details of exterior cornices, one-fifth full size; and full-size drawings of the stamps found on the bricks in various parts of the construction.
13. Plan des Fondations et des Fouilles.—Plan of foundations and excavations made on site.
14. Documents pour la Restauration de la Décoration intérieure.—Series of prints, photographs, and drawings, showing early decoration of interior.
15, 16. Études de la Structure.—Studies of one bay of interior, showing construction.
17. Photographies des Recherches et Fouilles faites en 1891–92.—Photographs of various parts of building exposed during the restoration.
18. Chapiteau sous la Portique.—Capital of pilaster of Portico.
19. Chapiteau de Portique.—Capital of Portico—existing state.
20. Plan restauré.—Study of plan restored.
21. Façade Principale restaurée.—Principal front showing the restoration of marble casing round building, bronze tiles of roof (taken off by Constans II., as stated in No. 30), &c.
22. Coupe transversale restaurée.—Cross-section showing the original decoration. See No. 14.
23. Étude de la Décoration interieure.—Study of one bay of interior showing the original decorative design.
24. Étude de la Construction d'une Chapelle rectangulaire.—Study of one of the rectangular chapels on the diagonal axes; plans and elevations.
25. Ordre intérieur.—Study of the order of the interior columns and pilasters.
26. Portique du Panthéon d'Agrippa.—Conjectural restoration of the original Portico of Agrippa showing ten columns in front.
27. Façade latérale.—Side view of Pantheon as at present existing.
28. Plan au-dessus de la 1ère et de la 2ème Corniches.—Plans taken above lower and upper cornices.
29. Same as No. 4, but in outline only.
30. Plans showing vault and roofing, and conjectural restoration of the bronze tiles removed by Constans II. in the seventh century, and taken to Constantinople.

The drawings fill thirty-five strainers in all, but only those described above were publicly exhibited, due to want of space for hanging them, and to the fact that, as outline drawings, they could not be seen to any advantage at a height above the eye. These form the work of M. Chedanne's fourth year as a *pensionnaire* of the Academy of France at Rome. During his third year he made drawings of the Tabularium in Rome, and of the Church of the Malatesta at Rimini, as well as of some Renaissance tombs in various parts of Italy. During his first and second years he made studies of ancient ornament and decoration, and drawings of the Theatre of Marcellus. His drawings of the Pantheon, recently exhibited, have not been published, nor has any one of them been photographed.

Mr. Phené Spiers's Description of the Drawings.

At the General Meeting held 7th inst. (Mr. Aston Webb, *V.-P.*, in the Chair), when the Award

of Prizes and Studentships was announced, and when, in connection with the drawings submitted for them, the exhibition of M. Chedanne's drawings was opened, Mr. R. Phené Spiers [*F.*] made a communication respecting the latter as follows:—

The "Grand Prix" students who are sent to Rome, though the work they undertake is not necessarily confined to the study of the monuments in that city, are expected, in the fourth and last year of the Travelling Studentship, to measure some important building of antiquity, to prepare elaborate drawings of the same, and to send them over to Paris as their "envoi" of the fourth year, together with a conjectural restoration of the building as it was originally built, and a report on the same. M. Chedanne selected the Pantheon as the subject of his "envoi," and had already measured portions of the structure when he discovered that the decoration of the interior formed an integral part of the construction, and could not be separated from it. This new theory having been communicated to the Italian Government, they decided to entrust certain restorations required in the coffers of the main vault to M. Chedanne's superintendence, and he was instructed to design the necessary scaffolding for the same. This formed the second part of M. Chedanne's researches, and it is to this fortuitous circumstance that we owe the most important discoveries.

Before proceeding to my description of the drawings, which I saw for the first time only on Saturday, a few words about the building itself, and the controversy which for many years has been going on with respect to the actual date of the Pantheon, may not be out of place. The Pantheon consists of an immense rotunda, 142 feet in diameter internally and the same dimensions in height. The wall surrounding it is 20 feet thick, in which on three of the cardinal points, viz. east, west, and north, are semicircular apses, the great entrance doorway being on the south side; and on the diagonal axes, four rectangular recesses. Besides these, there are other recesses in the 20-foot thickness of wall, so that it is not solid throughout.

The rotunda is vaulted with a hemispherical dome, with vertical and horizontal ribs enclosing coffers. There are thirty-two vertical ribs and five ranges of coffers, which rise to where the diameter is reduced to about 80 feet; above this the vault is not coffered, but the centre is pierced with an opening 30 feet in diameter, through which the interior is lighted. The centre of the hemispherical vault is about eleven feet below the upper cornice.

A description of the construction of this dome and of the outer shell which was supposed to be built on it is given in Viollet-Le-Duc's dictionary under the article "Voute," and it is accompanied by illustrations which I copied as diagrams for a Paper I read some years ago before the members of the Architectural Association. These diagrams have some special interest now, because they show that the scheme put forward by Viollet-Le-Duc from the researches of M. Choisy [*Hon. Corr. M.*] does not coincide with the actual construction as shown in M. Chedanne's drawings.

Piranesi, in 1743, had some work to do in connection with the roof of the Pantheon, and he suggested the existence of an outer shell of arches and ribs laid upon the inner vault. Viollet-Le-Duc put forward similar views, differing only in the arrangement of some of the upper arches. Isabelle, however, refused to believe in the existence of these arches, so that we turn with interest to see what is put forward in M. Chedanne's drawings. So far as I am able to follow them, there is no proof of an outer shell. Arches are shown at the back of the inner vault, but these arches are vertical, and are thrown across the eight recesses referred to, to transfer the weight of the vault down on to the piers between, and these arches may have given Piranesi the idea that there was an outer shell. The intersection of these arches with the vertical and horizontal ribs of the coffers is shown in the photograph in Frame 17, and in 15 and 16, studies of the construction of one bay. Further, the horizontal ribs said to have been flat arches are not built as such, as may be seen by the photograph in Frame 17.

The rotunda described is preceded by an octastyle portico 101 feet wide and about fifty-nine feet projection in the centre in front of the rotunda wall. The inscription on the frieze of this portico shows that it was erected by Agrippa 27 B.C., and it is built into the rotunda in such a way as to make it certain that both were built at the same time. Against this assumption antiquarians have pointed out—first, that it is quite impossible that a structure of such importance as the vaulted rotunda could have been built at so early a date. Secondly, that no mention of it is made by Vitruvius, who surely would have dwelt on its magnificent construction. Thirdly, that the grey granite of which several of the columns in the portico are formed was not brought to Rome till the reign of Trajan, or about the beginning of the second century A.D. Fourthly, that the buildings of the Augustan era were not faced with brick.

It may be interesting here to quote the following extract from Fergusson's *Handbook of Architecture*, written in 1855, and expressing his views thereon:—

> The pillars are disposed in the Etruscan fashion, and it is probable that originally they formed the portico to a three-celled temple. The portico, as we know, not only from the inscription but from the style, belongs to the age of Augustus, and it is generally supposed that it was at that time added by Agrippa to the existing rotunda. I feel convinced that the contrary was the case, and that the rotunda is very much more modern than the portico. We know from history that the building was frequently damaged by fire, and restored first by Hadrian, and after-

wards by Septimius Severus in the year A.D. 202. If the interior of the building, as originally erected, consisted of rectangular cells of the Etruscan form, constructed of wood —at any rate with a wooden roof—which I believe to have been the case, such disasters were not only possible, but probable; but no fire could damage such a building as we now find. Besides this, we know of no attempt at vaulting on anything like such a scale as this in the Augustan age, and the temples at that time all affected the Greek peristylar form. Thenceforward the cells were gradually enlarged, and gradually, too, the exterior was sacrificed to the interior, which characteristics are here carried to excess. Besides this, the masonry of the rotunda is full of useless discharging arches, and shows the peculiarities of the latest age. All these considerations put together would incline me to place it very near the age of Constantine, could I find any trace of a later restoration than that above alluded to; but, under any circumstances, I do not think it can have been erected before the age of Hadrian.

M. Chedanne's researches have solved, at all events, some of the difficulties thus raised.

Having had to take out some of the bricks in the vertical and cross ribs of the dome, he found them impressed with stamps,* which are known not to be earlier than the first half of the second century A.D.; and as Hadrian is known to have restored the Pantheon it is to his date that the rotunda must be ascribed. This, however, did not get over the difficulties of the date of the portico. In the course of his researches, however, M. Chedanne found the pavement of an earlier building 6·9 feet below the actual floor of the rotunda, and his contention is that Agrippa's portico was taken down and rebuilt at the higher level. The theory, therefore, which he puts forward is this: the portico was the front portion of a Roman temple built on the usual rectangular plan with a square cella, of which this pavement is a relic. This cella was destroyed by fire in Trajan's time, and Hadrian erected the rotunda in its place, attaching it to Agrippa's portico—this latter having been taken down in the time of Septimius Severus, A.D. 193, and rebuilt at a higher level. This is, however, not the termination of M. Chedanne's hypotheses. When measuring the pediment of the portico, he conceived the idea that its cornice formed part of a pediment of less size than the actual pediment, and he suggests that the original portico was decastyle, that there were ten columns in front, and not eight, as at present. He sends a drawing of the original conjectural portico, and it is on this subject that he will, I hope, enlighten us next week.

In the short discussion which followed Mr. Spiers's description of the drawings Mr. H. H. Statham [*F.*] remarked that they formed a prominent exhibit last May at the Salon in Paris. He was, perhaps, one of the few who had seen them there, and he was very glad indeed that there was an opportunity of their now being seen in London. They were drawings of the highest interest, and all English architects should see them. They must all feel gratified at the testimony M. Chedanne's discovery bore to the acuteness of reasoning of their own native writer, Fergusson. Fergusson sometimes made mistakes, but in many things he showed an acuteness of reasoning quite extraordinary; and the present instance, when they found his views confirmed by so eminent an authority, was one of the most remarkable examples of it.

The Hon. Secretary, Mr. Emerson, proposed a vote of thanks to Mr. Spiers for the trouble he had taken to put the matter before them, especially as the time at his disposal had been so short.

Mr. J. M. Brydon [*F.*] seconded the vote, and, being partly responsible for the appearance of the drawings, he heartily congratulated the Institute on obtaining the loan of them. The drawings were indeed very beautiful, and bore evidence of the most remarkable skill and care. Upon the archæological questions involved in the drawings it would be premature to remark; but he would call attention to the fact that Professor Middleton, who had given a great deal of study to the antiquities of Rome, was of opinion that the dome was really a mass of concrete from top to bottom; that there was no real construction by way of ribs and arches, and no lateral thrust. It simply stood on the top of its walls, and there was no solid thrust in it.

The Chairman (Mr. Webb) said they were indebted to Mr. Brydon [*F.*] for having suggested the application for the loan of the drawings. It was a most happy suggestion. It was, he believed, the first time that the French Government had lent drawings of the kind for exhibition in England, and they were not at all sure, when they made the application, whether it would be granted. But they were largely indebted to the President of the Académie des Beaux-Arts, M. Daumet [*Hon. Corr. M.*], for exerting his influence on their behalf.

* These stamps are shown full size on Drawing No. 12.

The British Academy of Arts in Rome.

The rising generation of artists may, perhaps, have reason to be obliged to Mr. E. J. Poynter, R.A., for a letter which appeared on the 15th inst., and to *The Times* for having published it, as follows:—

SIR,—May I be allowed briefly to call attention through your columns to the British Academy of Arts in Rome? This institution, founded in 1823, in which many artists now well established in public estimation have in past times studied, has of late years, from various causes, retired into a modest obscurity—"in short"—as Mr. Micawber might say, it has been shut. This complete abnegation of the principle that an academy, to be of any use, must be open for study arose chiefly from the fact that it was situated in inconvenient premises in one of the most crowded and noisiest thoroughfares in Rome, and with nothing to indicate its situation, its existence even being unknown to visitors to Rome.

This drawback has been recently removed by the transfer of the institution to convenient and well-lighted

rooms forming part of a small colony of studios in the Via Margutta, a quiet street behind the Via Babuino, and in the artists' quarter.

The first rule of the Academy provides that "every "British artist, on his arrival in Rome, shall be admitted "gratuitously to study in the Academy on application to "the Secretary."

For this purpose it is open for two hours every evening, during the winter months, for study from the living model, which is provided at the cost of the Academy, the only limitation being that there shall be not less than three students attending the class.

The Academy also contains an excellent collection of casts from the antique, which is open for study in the day-time; and there is also a good library containing many valuable works on art and general literature, from which, under certain conditions, members and students are allowed to borrow books.

By a new regulation ladies will be admitted as students, and various other modifications of the rules suggested in a report recently drawn up by Colonel Slade, at the request of Sir Clare Ford, our Ambassador at Rome, have been adopted, which, it is hoped, will put the Academy on a better footing, and render it more useful to British artists visiting or residing in Rome.

Recently affairs have worked in a vicious circle. Under altered circumstances, and from the fact of the Academy's existence having almost dropped out of knowledge, applications for admission have declined to the vanishing point; and the discouragement arising from this cause, combined with the rule that the class is not to be opened unless there are three students to work from the model, has favoured inaction and led to the closing of the institution.

The class, established in its new premises, is now regularly open and attended by six students, and this number will doubtless be increased as the advantages offered by the Academy come to be more widely known. Things are changed, no doubt, from the days when it was thought a necessary part of an artist's education to go to Rome; but, in spite of changes of fashion, and of other changes more lamentable, Rome still remains the capital and centre of art in its highest expression; and no one who would sound the heights and depths to which the noblest in art has attained can afford to ignore the lessons to be learnt there. There may still be young artists willing and able to make use of its glorious opportunities. They may find it advantageous to supplement their studies in museums and palaces by making use of the Academy life-class, and thus not altogether dropping their practical work.

Further information may be obtained from the Secretary, Alex. Coleman, Esq., 53B, Via Margutta, Rome.

I am, Sir, your obedient servant,

EDWARD J. POYNTER.

28, Albert Gate, S.W., 11th January.

The Academy of France at Rome, as may be seen at p. 185, was founded early in the Great Age of Louis Quatorze, and has prospered to this day. Is there anything—except apathy—to preclude the Great Age of Victoria from rendering the British Academy of Arts in Rome an equally brilliant success? Not, of course, by Government aid or expenditure of public money, but in British fashion—by corporate or private enterprise.

The Prizes and Studentships.

The annual competitions of the Institute this year have revealed one or two facts well worthy of record. The winners, as in some previous years, are not mainly provincial men, nor are they outsiders. Of the twenty premiated candidates, fifteen are Associates duly qualified by examination. Manchester sent an excellent essayist in Mr. Sutcliffe [*A.*], who was placed second for the Essay Medal. Cardiff may be congratulated on the drawings of Llandaff Cathedral, which won for Mr. John H. James a Medal of Merit in the Measured Drawings Competition. Birmingham and its Municipal School of Art are already proud of Mr. A. J. Dunn, the newly-elected Pugin Student, whose present address is in Gloucester. Mr. W. Tait Conner [*A.*], honourably mentioned in the Tite Competition, and Mr. Fogerty [*A.*], placed first among the competitors for the Grissell Medal, hail from Glasgow and Bournemouth respectively. Not the least important fact to be recorded this year is the prominence of Australians in the several trials of strength, three of those who submitted designs and drawings having carried off honours always highly appreciated by the Home students of the British Empire.

Manchester is also to be congratulated on having added to the list of Ashpitel Prizemen the name of Mr. Vernon Crompton [*A.*], who was placed at the head of the 96 passed candidates of 1894 by the Board of Examiners in Architecture. The work of the Pugin Student for 1894—Mr. R. Shekleton Balfour [*A.*]—was highly commended, at the Meeting of the 7th inst., by the Vice-President in the Chair, Mr. Aston Webb, and again on the 14th inst. by Mr. Brydon, who said:—"Let me "commend to your attention the drawings by "Mr. Balfour, made during his tour as Pugin "Student: the report he submitted with them is "an excellent record of his travels, and descriptive "of earnest work faithfully and diligently carried "out." Mr. Brydon also praised the report of Mr. Adams, the Godwin Bursar of 1894, which treats fully of the Eppendorf Hospital at Hamburg, and the Stuivenberg Hospital at Antwerp; and stated that an abstract of the same, or perhaps the report in its entirety, would appear, in due course, in the JOURNAL.

The Burlington-Devonshire Collection.

The terms of the Declaration of Trust entered into on the 17th ult. by the Institute and his Grace the Duke of Devonshire [*H.F.*] are as follow:—

This indenture, made the seventeenth day of December, one thousand eight hundred and ninety-four, between the Most Noble Spencer Compton Cavendish, Duke of Devonshire, Knight of the Garter (hereinafter referred to as the Duke), of the one part, and The Royal Institute of British Architects (hereinafter referred to as the Institute) of the other part: Whereas a collection of original Architectural Drawings has for some time past been in the charge of the Institute, and the Duke (the owner thereof), being desirous of

making some of such Drawings permanently accessible for the purposes of study and reference, has presented such of the same Drawings as are specified in the Schedule hereto to the Institute by way of gift, upon the terms that the Institute shall execute such Declaration of Trust with such agreements and provisions therein as hereinafter appears, and the same Drawings have been delivered to and are now in the possession of the Institute: Now this Indenture witnesseth that, in consideration of the premises, it is hereby agreed and declared, and particularly the Institute do hereby agree and declare with and to the Duke, that the Institute shall and will stand possessed of and hold the Drawings specified in the Schedule to these presents, and any Drawings acquired by purchase or exchange as hereinafter provided, for the purposes and subject to the provisions hereinafter expressed and contained (that is to say)—

1. The Drawings specified in the Schedule hereto, and any Drawing acquired by purchase or exchange as hereinafter provided (all which are hereinafter referred to as the Collection), shall be kept together in one Collection, to be called the "Burlington-Devonshire" Collection.

2. The Collection shall be kept in some convenient room or rooms in the existing Institute building, or other the Institute building, or principal building for the time being of the Institute. It shall not be obligatory on the Institute to keep the Drawings now in portfolios as at present arranged, but they may at any time and from time to time rearrange the Collection (as well the articles now in boxes as those now in portfolios) in portfolios, boxes, or otherwise, as they may think desirable and convenient.

3. The Collection shall at all reasonable times be open for the purposes of study and reference to all present and future members and students of the Institute, and any other persons privileged in such behalf by the Council of the Institute, under and subject to such rules and regulations as the Council of the Institute may from time to time deem necessary or expedient. Such rules and regulations may (among other things) prescribe the days, hours, and times during which the Collection shall be open, and any rules and regulations may from time to time be rescinded or varied, and new rules and regulations made.

4. The Institute shall have power from time to time, if and when the Council think fit, to sell or exchange for other Drawings or Books of a similar character, or of a character similarly suitable to benefit the study of Architecture, any Drawings or Books comprised in the Collection; but no such sale or exchange shall, during the lives or life of the children, grandchildren, and great-grandchildren of Her Majesty Queen Victoria living at the date of these presents, or of the survivors or survivor of them, or within the space of twenty-one years after the death of such survivor, or (if and so far as the law will permit) at any time afterwards, be made without the consent in writing of the Duke of Devonshire (if any) for the time being, or, if he shall be a minor, of his guardian or guardians.

5. The Institute will keep and preserve the Collection in good repair and condition, reasonable wear and tear, and loss or damage by fire or accident, excepted.

6. The Institute will forthwith insure, and at all times hereafter keep insured, against loss or damage by fire and other accidents, the Collection in the sum or aggregate sum of four hundred pounds at the least in the Westminster Fire Insurance Office, or in some other Office or Offices of repute to be approved of in writing by the Duke of Devonshire (if any) for the time being, and will whenever required produce to the Duke of Devonshire for the time being or his agent the policy of every such insurance and the receipt for the last premium.

7. Any moneys arising from sales under the foregoing power of sale, or received by the Institute for equality of exchange, or from any such insurance or insurances as aforesaid, shall be laid out in the purchase of other Drawings or Books of a similar character, or of a character similarly suitable to benefit the study of Architecture, and the Drawings or Books so purchased or acquired upon any such exchange as aforesaid shall be added to and for all purposes form part of the Collection.

8. If at any time during the lives or life of the children, grandchildren, and great-grandchildren of Her Majesty Queen Victoria living at the date of these presents, or of the survivors or survivor of them, or within the space of twenty-one years after the death of such survivor, the Institute shall be dissolved or shall otherwise cease to exist, the Collection shall revert to and become the property of the person (if any) who at the time of such dissolution or cesser shall be Duke of Devonshire.

9. In the event of the title of the Duke of Devonshire becoming extinct, the person who shall for the time being be the holder of the next highest title in point of precedence now held by the Duke and for the time being subsisting shall for the purposes of these presents be deemed to be Duke of Devonshire for the time being.

In witness whereof His Grace the Duke of Devonshire has hereunto set his hand and seal, and the Institute have caused their common seal to be affixed the day and year first above written.

THE SCHEDULE.

PORTFOLIOS (17).

I. "Therme di Costantino in Roma, Disegnata da "Andrea Palladio." Seven mounted and two unmounted drawings.

II. "Therme di Vespasiano in Roma, Disegnata da "Andrea Palladio." Six mounted drawings.

III. "Therme di Nerone in Roma, Disegnata da Andrea "Palladio." Eight mounted drawings.
IV. "Therme di Tito in Roma, Disegnata da Andrea "Palladio." Five mounted drawings.
V. "Therme di Dioclesiano in Roma, Disegnata da "Andrea Palladio." Eight mounted drawings.
VI. "Therme di Antonino in Roma, Disegnata da "Andrea Palladio." Eleven mounted drawings.
VII. "Therme di Agrippa in Roma, Disegnata da "Andrea Palladio." Six mounted drawings and one mounted bird's-eye view of Rome, entitled "La Città di "Roma delineata nel Pontificato di Pio IV., l'anno "MDLXII. 1562."
VIII. "Fabrichi antichi di Andrea Palladio." Twenty-three mounted drawings.
IX. "Edificii antichi da Andrea Palladio." Eighteen mounted drawings.
X. "Edificii antichi da Andrea Palladio." Twenty mounted drawings.
XI. "Edificii antichi da Andrea Palladio." Twenty-five mounted drawings.
XII. "Edificii antichi da Andrea Palladio." Twenty-three mounted drawings.
XIII. "Disegni di Andrea Palladio." Eighteen mounted drawings, one small mounted drawing said to be by Raphael, and one unmounted drawing.
XIV. "Disegni di Andrea Palladio." Seventeen mounted drawings.
XV. "Edificii da Andrea Palladio." Sixteen mounted drawings.
XVI. "Disegni di Andrea Palladio." Twenty-one mounted drawings.
XVII. "Disegni di Andrea Palladio." Twenty-seven mounted drawings.

BOXES (NUMBERED 2 AND 3).

Box 2.—Works by Kent and others: sixty-four mounted drawings. Forty-two mounted drawings, a numbered series 1-44, two wanting, mostly identified with plates in Kent's book, Vols. I. and II.; Forty-four mounted drawings of Greenwich Hospital (some doubtful).

Box 3.—Twenty-one mounted drawings and one unmounted drawing, mostly copies and duplicates; nine mounted drawings by Vignola and others; sixteen mounted drawings, probably by Italian draugh smen; seventy-eight mounted drawings, and one smaller mounted drawing, by Inigo Jones, John Webb, and others; twelve mounted drawings with names of Inigo Jones and John Webb inscribed on the mounts respectively; five mounted drawings bearing the signature of "Inigo Jones," and two mounted drawings bearing the signature of "John Webb."

Signed, sealed, and delivered by his Grace the Duke of Devonshire, in the presence of } DEVONSHIRE. (Seal)

C. Herbert Currey, 14, Great George Street, S.W.

Additions to the Library.

His Highness the Maharaja of Jeypore has presented through the publishers [W. Griggs & Son, Ltd., Hanover Street, Peckham] the latest contribution (Part 7) to the *Jeypore Portfolio of Architectural Details*, which is devoted to illustrations of String and Band Patterns. Readers may be reminded that the whole of this valuable series may be consulted in the Reference Library. There are sixty-four plates in the present part, many of which are coloured, and all of which have been reproduced to a large scale, so that they may be found useful as working drawings, as well as interesting objects of study, by architects. The Portfolio has been compiled chiefly from works in or near Delhi and Agra, and in Rajputana, the series being prepared for publication under the supervision of Colonel Jacob [*H.A.*], Engineer to the Jeypore State.

The "Builder Album" of Royal Academy Architecture for 1894, recently acknowledged in the JOURNAL, has been supplemented, through the kindness of the Publisher of *The Builder*, by the volumes for 1892 and 1893, which complete the continuity of this admirable series on the shelves of the Library.

The Soil in Relation to Health, by H. A. Miers and R. Crosskey [London: Macmillan & Co.]; *The London Building Act* 1894, with Introduction, Notes, and Index, by W. F. Craies [London: Sweet & Maxwell, and Stevens & Sons]; *The London Building Act* 1894, edited by Bernard Dicksee [*A.*] [London: Edward Stanford], have also been presented.

The following books have been received since the last issue of the JOURNAL: *The Church of Sancta Sophia, Constantinople*, by W. R. Lethaby and the late Harold Swainson [London: Macmillan & Co.]; *The Life of Christ as represented in Art*, by the Ven. Archdeacon Farrar [London: A. & C. Black]; *An Elementary History of Art*, by Mrs. A. Bell, 4th edition [London: Sampson Low & Co.]; *History of the Tower Bridge*, and of other Bridges over the Thames built by the Corporation, by Charles Welch, F.S.A., with a description of the Tower Bridge by J. Wolfe Barry, C.B. [*H.A.*], presented by the Bridge House Estates Committee; Seyffert's *Dictionary of Classical Antiquities*, edited by H. Nettleship and J. E. Sandys [London: Swan Sonnenschein & Co.]; Murray's *New English Dictionary*, presented by Mr. B. Ingelow [*F.*] [London: Henry Frowde]; *Pen Pictures and How to Draw Them*, by Eric Meade [London: L. Upcott Gill].

NOTES, QUERIES, AND REPLIES.

FRENCH ARCHITECTURAL EDUCATION.

The Academy of France at Rome.

The list of French students of architecture entered at Rome—and M. Chedanne is one of the latest—is a long one, dating as it does from the year 1720. Since then, with the exception of the years of disorder 1794–5–6, and a few other years, the French Government have sent a student of architecture annually to the Academy of France at Rome; and in some years two such students have been sent. Among them are such names as Dorbay (1739), Clérisseau (1746), David Leroy (1750), De Wailly (1752), Peyre, jun. (1762), A. L. T. Vaudoyer (1783), Percier (1786), Guenépin

(1805), Huyot (1807), Caristie (1813), Lesueur (1819), Blouet (1821), Duban (1823), Labrouste (1824), J. L. Duc (1825), L. Vaudoyer (1826), V. Baltard (1833), Lefuel (1839), Ballu (1840), L. J. André (1847), Brune (1863); and a host of other architects, who did well in their time, whom it is impossible to mention here. Again, among the living may be cited the names of Alfred Normand (1846), Charles Garnier (1848), Honoré Daumet (1855), Hon. Corresponding Members of the Royal Institute of British Architects, and many others in practice at the present time.

The establishment of the Academy of France at Rome was the work of Louis Quatorze and his great Minister, Colbert. The King commanded that "the sound principles and most correct rules "of architecture should be publicly taught two "days a week, in order that a nursery, so to speak, "of young architects might be formed; and to "give them more courage and passion for the art, "the King ordered that, from time to time, prizes "should be awarded to those who succeeded best, "promising that a certain number of the young "men so premiated should be sent immediately "at the Royal cost to Rome, in order that nothing "might be wanting on the King's part to com-"plete their education and render them fit to act "in the conduct and superintendence of the Royal "buildings." This was after Desgodetz had been despatched by Colbert on a mission to Rome to measure the finest of the ancient buildings remaining there—the results of that architect's labours not having been published until 1682. But long before—as early as 1666—Louis Quatorze had sent young painters and sculptors to Rome; and established, at the Palazzo Capranica, an academy in which twelve artists were to be lodged and boarded at the Royal cost, each for a term of five years. Its first Director was the President of the Royal Academy of Painting and Sculpture in Paris; and he, in March 1666, left for Italy with twelve young Frenchmen for the purpose of pursuing their studies in Rome. This period was also eventful for architecture. The Italian, Bernini, who had just completed the colonnade of St. Peter's, and who was in Paris at the invitation of the King, had visibly impressed His Majesty with the magnificence, long fallen into disrepute, of the master-art; and in 1671, by the exertions of Colbert, was founded the Royal Academy of Architecture, which still exists, partly as a section of the École des Beaux-Arts and partly as the third section of the Académie des Beaux-Arts, one of the five Academies now composing the Institut de France, which was founded, by a decree of the Republic, on 22nd August 1795.

The Palazzo Capranica had long been used for the purposes of the Academy, when it was transferred to the Palazzo Mancini; leaving that palace in 1803 for the Villa Médicis (as the French term it) where it is still housed.

The course of events which led to the formation of the present École des Beaux-Arts, some particulars of which were furnished about ten years ago to the Editor of the JOURNAL by the late Albert Lenoir, formerly Secretary of the École, is instructive as showing how the arts emerged from the flood of destruction which deluged in France at the end of the last century and the beginning of this:—

The condition of architecture after the Revolution was most unsatisfactory. Of the Royal Academy, suppressed in 1793, no trace was permitted to remain. The systematic study of architecture was discontinued until David Leroy, a *pensionnaire*, in 1751, of the French Academy at Rome, afterwards celebrated for his researches in Greece, and known to Englishmen from his controversy with Athenian Stuart, collected together a few young men and taught them in private.

About that time Antoine L. T. Vaudoyer drafted a scheme for a School of Architecture, and in 1800 he joined Leroy. The two, with the assistance of L. P. Baltard and, among others, Fontaine and Percier, promoted emulation by offering prizes for designs and drawings, to be submitted in competition, according to definite instructions issued for the purpose, within the studio, or *atelier*, they conducted. This school, founded and developed by private enterprise, was afterwards removed to the *Louvre*, and ultimately taken under Government protection at the *Collège Mazarin* (the present *Palais de l'Institut*), in which, at that time, the students' competitions for the annual *Grand Prix de Rome* used to take place.

In such a manner the *École des Beaux-Arts*, the most justly-famous school of its kind in the world, came into existence. In 1816 it was removed to the *Couvent des Petits Augustins de la Reine Marguerite*, in the street of that name, now called the *Rue Bonaparte*, where it is still located. At that time the Convent Buildings contained the *Musée des Monuments français*, which was a collection of fragments of royal tombs and effigies, and of monuments of distinguished Frenchmen, preserved from iconoclastic fury by the reverential care of the scholar and gentleman. The Museum was abolished in 1816; in its place the present *École des Beaux-Arts* was begun. This was effected by the adaptation of parts of the old Convent and the construction of new buildings, first under the charge of Debret, and afterwards of Duban—both members of the *Institut*. On the 4th August 1819 a Royal ordinance determined the rules of the School, and divided the section of architecture into two classes. No change occurred until 1863–64, when the School was reorganised by Napoleon III., and in a manner which has since undergone hardly any alteration in principle.

A young Frenchman, in order to gain admission as an "Élève de l'École des Beaux-Arts," has to pass an examination, after which he is received into the second class of the School. He has then to work on the various competitions and other exercises belonging to this grade, and relating to both the science and art of architecture, to ornament and figure drawing, and to the modelling of ornament. These courses of study, moreover, include mathematics, physics, and chemistry generally, descriptive geometry, perspective, stereotomy, and construction. Numerous prizes of every kind are awarded to the *elèves* both in the first and second classes. It is, however, impossible to devote space to a full description of a French student's career; all that can be done is

to describe the final competition in which he may take part:—

The competitions for the *Grand Prix de Rome* take place at the *École des Beaux-Arts*, and they are open only to candidates of French nationality under thirty years of age, whether students of the School or not. In the case of architecture, as in those of painting and sculpture, the competition is an annual one, adjudicated on by nine architects, who are chosen by ballot from a list presented by the Council of the School. In like manner nine painters and nine sculptors compose the juries of their respective sections. The conditions of admission to the competition for the *Grand Prix* in architecture are very simple. In March of every year a preliminary trial takes place. The candidate has to make a sketch (*esquisse*) in twelve hours, and from the authors of these sketches the jury select 25, who have to undergo a second ordeal, which consists of another sketch, to be made in twenty-four hours. From these last, 10 candidates are chosen, and they enter their *loges* for seventy-two days. A *loge* is an inclosure within which, as before mentioned, a candidate works all day, beginning at 8 a.m., and during the period of trial he is not permitted to enter the *loges* of the other competitors or introduce anybody into his own. A careful programme of the work he has to do is given to him by the Academy of Fine Arts, and this last year (1883) it was "a Necropolis." Out of the 10 competitors 3 are selected and premiated. The first obtains a gold medal, which has always been, and, I believe, is still, regarded as the highest prize open to French students, and he leaves early in the following year for the Academy of France at Rome, where he is lodged and boarded at the cost of the nation.* The competitors placed respectively second and third also receive medals, and gain a just distinction thereby; they further are exempted, should they try again for the *Grand Prix*, from submitting preliminary sketches.

Nor is this the place in which to enter on a description of the Diploma in Architecture granted after examination to students of the École des Beaux-Arts, after they have obtained a certain number of medals, &c., in the various competitions of the School, or in the "Prix de Rome." To continue:—

At the *Villa Médicis* the student has a bedroom and a studio allotted to him: he dines and sups at fixed hours at a common table; he has to conform to the rules of the Academy, and to submit while there to the orders of the Director, who is always a French painter, appointed for five years, one of the conditions of the appointment being that he shall have previously resided in Rome. The original term of a student's sojourn was five years, but in 1864 this was reduced to four years. By a pleasant fiction he is supposed never to re-enter Paris during those years, the real fact being that, so long as a student fulfils his obligations in the matter of drawing, no restraint is put upon his actions. It is a part of his duty, after the second year, to visit the principal cities of Italy, and he may extend his tour to Greece. During the first year of his sojourn he has to make four studies of detail from such of the finest ancient buildings as he may choose in Rome and Central Italy; the second year he must make four studies of detail, from the ancient monuments of Italy, and add some details of *Renaissance* architecture; the third year he has to draw two sheets of details from ancient monuments of Italy (including Sicily) and Greece; and all the foregoing must be drawn to a scale of one quarter of an inch to a foot. During this same year the student has also to make a restoration of a part of some ancient monument the details of which he has hitherto been drawing; and the restoration must show the character of the construction the principal points of which he has to describe in an explanatory *mémoire*. The student has, moreover, to make detail drawings of external and internal ornaments, together with views of buildings and portions of buildings erected during the Middle Ages and the *Renaissance*. Tracings of these are preserved in the archives of the Academy, but the original drawings remain the property of the student. In the course of the fourth year he makes the geometrical drawings of an ancient building, either of Italy or Greece. These drawings are coloured and executed from the building itself, representing it exactly as it appeared at the time. The student has also to make another set of drawings of the same building restored to its pristine condition, or as he supposes it to have originally been, adding an historical notice of it and an account of its construction. He has also to make detail drawings, a quarter full-size, of the most interesting or characteristic portions of the building; and all these drawings become the property of the Government.

The student on his return from Rome reports himself to the Academy in Paris, and his name is then sent to the Government. He is afterwards admitted, as an assistant, to the Conseil Général des Bâtiments Civils, a council established by Colbert for the purpose of advising him upon matters regarding buildings, which met in the great Minister's time twice a week—on Tuesday and Friday—and still meets on those days. Admission to that board gives the student of Rome in due time a right of presentation to some public building or national monument, in which he becomes the subordinate of some architect of eminence, who has risen to high position after a similar course of training. As an *Inspecteur*, the student passes the day upon building works, checking the quantity and character of materials, and the hours of workmen employed. He rises in time to be assistant-architect, then, perhaps, joint-architect, and he may ultimately become the architect-in-chief to the very work upon which he began as an *Inspecteur*. To quote further from a small English treatise on this and like subjects connected with public buildings in France, the student of Rome will be summoned in course of time to take a place of Councillor on one or other of the several boards pertaining to various administrative departments. The Académie des Beaux-Arts will hear of him again; and having at their disposal the record of his earlier career, the Academicians have no need to make a humiliating inquiry of outsiders for possible recruits.

Those who desire to obtain fuller particulars of the Academy of France at Rome than can be given in a hasty compilation like this will do well to read the late Victor Baltard's *Villa Médicis à Rome* (fo. Paris, 1847). Information on the whole subject will also be found in TRANSACTIONS, 1883–84, in a Paper entitled "A Brief Review of

* Irrespective of the Government allowance, certain other sums of money fall to the winner of the *Grand Prix* in architecture, the proceeds of special legacies left for the purpose at various times by discriminating persons.

"the Education and Position of Architects in "France since the year 1671."

The Examination for Admission to Candidature: An Historical Note [pp. 137–141].

From ARTHUR CATES [*F.*]—

The notice of the Memorial from the Architectural Association contained in the article on the Examinations [pp. 137–141] may fitly be supplemented with some particulars of its origin. In 1854, when the question of architectural education was being anxiously considered by the Committee of the Architectural Association, there appeared in the Paris architectural journal, *L'Encyclopédie d'Architecture, par Victor Calliat et Adolphe Lance*, a series of articles * entitled "Du Diplôme d'Architecte." These, reprinted in a collected form as "Extrait de l'Encyclopédie," constituted the Essay by Adolphe Lance, "Du "Diplôme d'Architecte," which formed the subject of the late John Woody Papworth's Paper read on the 19th November 1855. Being a subscriber to the *Encyclopédie*, and receiving it monthly from Paris, I brought these articles under the notice of the Committee of the Architectural Association, of which I was then one of the Hon. Secretaries. In the Session 1854–55 a Paper, entitled "Considerations as to the Pro-"priety of conferring a Diploma upon Archi-"tects," † was read before the Architectural Association by the late John Henry Chamberlain, of Birmingham. The Opening Meeting of the succeeding Session, 1855–56, was held at Lyon's Inn Hall on the 5th October 1855, and in the report read by the Hon. Secretary it was stated that, "in consequence of the interest taken "in the Paper on Architectural Diplomas, "it had been determined to memorialise the "Royal Institute of British Architects on the "subject." ‡ In the course of his Presidential Address delivered that evening Mr. Alfred Bailey expressed most ably and effectively the views and aims of the Association. Mr. William Tite, M.P., at that time one of the Vice-Presidents of the Institute, had been invited to attend the Meeting in the hope that his powerful support would be enlisted on behalf of a scheme of professional education. In addressing the Meeting he dealt at considerable length with the question of scientific education in England, attributing the prevailing low standard to the want of a good, sound elementary education. It was essential, he said, in order to give a proper direction to the scientific instruction afforded at lectures or in the architect's office, that a system of examination should be instituted which might be conducted by the Institute or other competent body. It is interesting to read Mr. Tite's "Remarks on the Present Condition "and Future Prospects of Architecture in Eng-"land," with which he opened the Institute Session in November of the same year.* He referred in terms of warm approval to Mr. Bailey's address, and to the aspirations of the young men about to embark in an anxious and arduous profession. The need of a diploma, or other recognition of their attainments, was sorely felt; and it was an important step in the history of their art that they should be willing to submit themselves to an examination in order to obtain an opinion on their professional merits and acquirements.

Mr. Tite concluded his Address by a reference to the qualifications required from architects in Prussia, who were subjected to a strict examination in literature and general and technical science, the examination being oral, public, and competitive. As an Appendix to the Address were printed some "General Abstracts of Regulations for "Architectural Education and Examination at "Berlin, translated from the Original Papers." † In the opening paragraph of his Paper, "An "Abridgment of M. Lance's Essay, entitled 'On "'a Diploma in Architecture,' with Remarks and "Suggestions," ‡ Mr. J. Woody Papworth referred to the opportunity the Essay afforded "for offering to the attention of the Institute "the history of what has been done in France "with regard to the important question of "which Mr. Tite urged the consideration—viz. "the institution of an examination, and of its "necessary result, a diploma." At this same Meeting I announced, on behalf of the Architectural Association, that, as abovementioned, they had unanimously agreed to a Memorial on the subject of the diploma, which would be laid before the Institute. § The presentation of the Memorial was delayed through the serious illness of Mr. Bailey, who was prostrated by a recurring attack of fever, originally contracted at Ostia, and who, in fact signed the Memorial, lying in bed, as soon as he was able to hold a pen.

Elected on the Council in 1875, I at once commenced working to secure the realisation of the aims of the Memorialists. As an Examiner, in 1877, in conjunction with Professor Hayter Lewis and Mr. Penrose, I became acquainted with the details of the Voluntary Examination, the tardy but inadequate outcome of the consideration given by the Institute to the Memorial of the Association, and was more than ever convinced of the absolute necessity for a change of principle. The establishment of the Obligatory Examination in 1882 was a great stride in the required direction, and its success speedily justified a further development; but it was not till 1889 that the aspirations of the Memorialists of 1855 seemed

* Vol. IV. No. 8, 1 Aug. 1854; No. 11, 1 Nov. 1854; Vol. V. No. 3, 1 March 1855.
† *Builder*, Vol. xiii. p. 412. ‡ *Ibid.* Vol. xiii. p. 482.

* *Sessional Papers*, 1853–56, p. 1.
† *Ibid.* p. 5. ‡ *Ibid.* p. 23. § *Ibid.* p. 37.

within measurable distance of realisation. Having taken an active part in the preparation of the "Memorial," I greatly appreciated the privilege, accorded to me on the 8th April 1889, of submitting to the Institute in General Meeting the complete scheme of Progressive Examination* which at length has come into full operation—forty years after the establishment of such a course had been urged on the Institute by the Architectural Association.

The London Building Act 1834.

From JOHN HEBB [*F.*]—

Many persons are under the impression that the Tribunal of Appeal constituted by the 175th Section of the London Building Act 1894, which a delinquent builder might apostrophise—

Auguste Tribunal, ma gloire et mon appui,
C'est toi dans mes malheurs que j'implore aujourd'hui—

is a novelty, and are unaware that a very similar tribunal for the purpose of settling building differences was established fifty years ago, but proved so unsatisfactory that in the course of a few years it was abolished.

The 80th Section of the Metropolitan Buildings Act 1844 (7 & 8 Vict., cap. 84) enacted "for the purpose of providing for the appointment of competent Official Referees to superintend the Execution of this Act throughout all the Districts to which it is applicable, and also to determine sundry Matters in question incident thereto, as well as to exercise in certain Cases a Discretion in the Relaxation of the fixed rules and directions of this Act, where the strict Observance thereof is impracticable, or would defeat the object of this Act, or would needlessly affect with injury the course and operation of this branch of business." One of Her Majesty's principal Secretaries of State was empowered to appoint "Two Persons, being of the Profession of an Architect or Surveyor, to be Official Referees of Metropolitan Buildings." The Official Referees were prohibited from acting as surveyors "either alone, or with any partner, or by an agent," or as Official Referees with regard to any building or matter in which they were employed as architects. It will thus be seen that the Official Referees were not precluded from taking private practice.

The first two Official Referees appointed under the Act were Mr. James White Higgins† and Mr. William Hosking, F.S.A.* By a subsequent Act, 9th Vict., cap. 5 (1846), a third Official Referee was appointed, and the prohibition as to the Official Referees acting as surveyors was removed. Mr. John Shaw, an architect of eminence, and surveyor to Christ's Hospital,† and Mr. Ambrose Poynter, father of Mr. E. J. Poynter, R.A., were afterwards appointed Official Referees.

The duties assigned to the Official Referees were to superintend the District Surveyors, and to determine all questions referred to them, whether expressly by the Act or at the instance of one or more of the parties concerned. Their jurisdiction extended particularly, in the inflated language of the Act, "as to whether the Requirements, implied in Terms of Qualification applied to Sites, to Soils, to Materials, or to Workmanship, or otherwise, and denoting good, sound, fireproof, fit, proper, or sufficient, are fulfilled in certain Cases," as to the boundaries of districts, the examination of district surveyors, dangerous structures, and the expenses and proportion of cost of party-walls. The awards of the Official Referees were declared by the Act to have the same force as if they had been appointed by the Court of Queen's Bench, and to be binding and conclusive against every person, including the Queen's Majesty; the Official Referees were further empowered to administer an oath or take an affirmation.

The Official Referees were assisted in the examination of candidates for the office of District Surveyor by a Board consisting of Sir Robert Smirke, Mr. (afterwards Sir) James Pennethorne, and Mr. Thomas Cubitt.

The Official Referees were also assisted by an official styled the Registrar of Metropolitan Buildings, who was appointed by the Commissioners of Works and Buildings. The duty of the Registrar was to seal all documents made by the Official Referees, unless it appeared to him that the documents were contrary to law, or informal, or beyond the competency of the Official Referees, in which case it was his duty to refuse to affix the seal, and to report the matter, together with the grounds for his refusal, to the Commissioners. Mr. Symonds was Registrar of Buildings.

The Official Referees and the Registrar were each paid a salary of one thousand pounds a year, by four quarterly payments, one-half of which was raised by means of a rate of the nature of

* *The R.I.B.A. Journal*, Vol. V., N.S., p. 263.

† Mr. Higgins was a Surveyor who had an extensive practice in compensation cases, and was employed by the Office of Woods and Forests, the Admiralty, the War Office, the Board of Ordnance, and other Government Departments. Mr. Higgins resigned shortly after his appointment, and for a considerable time all the duties of the office were discharged by Mr. Hosking. Mr. Higgins died 13th May 1854.—J. H.

* Mr. Hosking (born 1800, died 1861) was engineer to the West London Railway, and Professor of Architecture at King's College. He was the author of several works on architectural subjects, contributed to the *Encyclopædia Britannica*, and claimed to have first proposed to place the Reading-room in the inner quadrangle of the British Museum—a doubtful distinction for which few architects nowadays would care to contend.—J. H.

† Mr. John Shaw, in addition to several buildings at Christ's Hospital, designed the Naval School at New Cross and Wellington College, Sandhurst. He died in 1870.—J. H.

a county rate levied upon the undermentioned localities in the following proportions, viz.:—

City of London .	£ 100	County of Surrey .	£320
County of Middlesex	1,000	County of Kent .	80

The remaining half, or £1,500, was paid out of the Consolidated Fund. The office expenses appear to have been defrayed by fees.

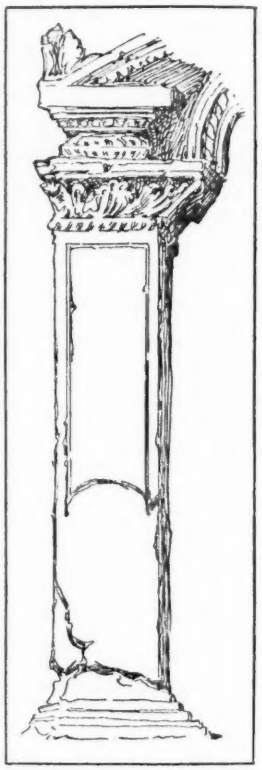
The awards of the Official Referees occasioned general dissatisfaction, and their office was abolished by the Metropolitan Building Act 1855 (18 & 19 Vict., cap. 122), the Official Referees and Registrar receiving a retiring allowance of two-thirds of their salary.

The Classical Influence in the Architecture of the Indus Region [Vol. I. pp. 93, 134, 147, 150, 191].

From Wm. Simpson [*H.A.*], R.I.—

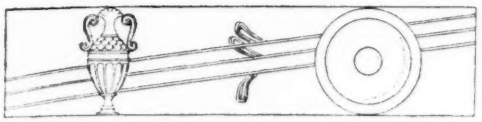
In my Paper on this subject, read before the Institute about a year ago, an endeavour was made to show from a few well-marked details that the Buddhist architecture of the Indus region and Afghanistan owed its classical features, not to Greek, but to Roman influence, and that these characteristics came to India through Palmyra. Amongst these details, one was the curved form of the upper and lower ends of the panels on the pilasters. I was then able to refer to similar panels on the soffits of the architraves at Palmyra; and to the fact that pilasters also existed among the ruins with a panel approximating so closely to those on Buddhist monuments that it was in itself sufficient to account for the origin. Another reference was to M. de Vogüé's *Syrie Centrale*, where a panel with semicircular ends is given. Professor Hayter Lewis has pointed out to me another, and a very interesting, illustration of the same form, of Palmyrene origin. Strange to say, it is found in this country—which, I think, renders it worthy of notice even though it did not bear on the wider, and perhaps more important, question of the classical influence on the banks of the Indus. The monument was found on the site of the Roman camp at South Shields, and is now preserved in the Museum of the Free Library at that place. It had been erected to the memory of the wife of a Palmyrene—she was a native of Britain, and her husband, it may be supposed, was serving with the garrison of Hadrian's wall between the Tyne and the Solway. An illustration of the monument is given on p. 239 of Dr. Bruce's *Handbook to the Roman Wall*. The inscription on it is bilingual—one in Latin, and the other in Palmyrene. Dr. Bruce's translation of the first is as follows:—"To the divine shades. To Regina, a "freed woman and [his] wife, Barates, a Pal- "myrene, [erected this monument. She was] by "nation a Catuallaunian, [and lived] thirty years" [*Ib.* p. 239]. The Palmyrene inscription has been translated as: "Regina, a freed woman of Barate." The monument is a niche with a sitting figure of a woman: there are two pilasters supporting an arch, over which there is a pediment. The capitals of the pilasters are a rude imitation of the Corinthian—at least, they bear more resemblance to that than to any other order. The panels stop short some distance from the base; the top is square, but the lower end is semicircular. I give an outline of one of them. If a native of Palmyra could carry such a detail across Europe to the banks of the Tyne, it removes all doubt about the possibility of others bearing the same detail to the Indus.

The following quotation is from an official publication of the Bombay Government: * it comes under the head of "Historical Summary." "In "the meantime a great migration of the nations "of Northern Asia "brought the Yuechi "or Kusháns into "Baktria [B.C. 126], "and eventually [B.C. "20] into North- "Western India, "while a number of "Turki or Tartar "tribes overran Sei- "stán and Baluchi- "stán [B.C. 100], and "established several "kingdoms there and "in Scind. The new "comers infused new "vigour into Indian "culture; Buddhism "now first began to "cross the frontiers "[A.D. 70]; and the "trade with Rome, "which sprang up "about A.D. 40, "brought ever-grow- "ing wealth to the "cities of the west- "ern coast" [*Ib.* p. 47]. There follows this in the next paragraph: "... through "troubles in Scind "[A.D. 247], the fall "of Palmyra [A.D. "273], and the ex- "tinction of Chash- "tana's line, com- "merce fell into "decay." If this is correct history it would appear that Buddhism began to extend across the Indus about the time when the trade with Rome through Palmyra began. I should be inclined to think that the missionaries had carried Buddhism into Gandhara and Kashmir before that; but the dates given above, I think, indicate that the classic influence probably began about the middle or end of the first century A.D.



Pilaster on Monument found at South Shields, on the line of the Roman Wall.

* *Geographical and Historical Sections of the General Administration Report, Bombay Presidency*, 1892-93.



MINUTES. V.

At the Fifth General Meeting of the Session, held on Monday, 7th January 1895, at 8 p.m., Mr. Aston Webb, F.S.A., *Vice-President*, in the Chair, with 23 Fellows (including 8 members of the Council), 39 Associates, and 15 visitors, the Minutes of the Meeting held 17th December 1894 [p. 135] were taken as read and signed as correct.

The receipt of donations to the Library was announced, and an expression of the thanks of the Institute to the several donors was ordered to be entered on the Minutes.

The following Associates, attending for the first time since their election, were formally admitted and signed the Register, namely:—George Percy Pratt, John Humphreys Jones, B.A. Lond., and Robert John Thomson.

The President having read the Deed of Award of the Prizes and Studentships 1895, made under the Common Seal [Appendix], the sealed envelopes bearing the respective mottoes or devices of the successful competitors were opened, and their names and addresses found to be as follow:—

THE ROYAL INSTITUTE SILVER MEDAL (Essays).

Bid me Discourse.—Arthur Thomas Bolton [*A.*], 2, The Sanctuary, Westminster, S.W. (The Silver Medal and Twenty-five Guineas).

Craigside.—George L. Sutcliffe [*A.*], Heptonstall, *via* Manchester (Ten Guineas).

Research.—J. Humphreys Jones [*A.*], B.A. Lond., 94, Dalston Lane, N.E. (Honourable Mention).

Ye Skeptic.—Alfred C. Houston [*A.*], 13, Furnival's Inn, E.C. (Honourable Mention).

THE ROYAL INSTITUTE SILVER MEDAL (Drawings).

Lady Margaret.—W. Henry Ward [*A.*], 18, Lyndhurst Road, Hampstead, N.W. (The Silver Medal and Ten Guineas).

Earendel.—John H. James, 47, Romilly Crescent, Cardiff (Medal of Merit).

THE SOANE MEDALLION.

Southern Cross.—Hubert S. East [*A.*] (Tasmania), 110, Harbut Road, St. John's Hill, S.W. (The Medallion and, under conditions of foreign travel, £100).

Lion's Head.—Chas. H. B. Quennell, 44, Foxley Road, North Brixton, S.W. (Medal of Merit and £5).

Scallywag.—Harry Jefferis [*A.*] (Sydney), 37, Maitland Park Road, Haverstock Hill, N.W. (Medal of Merit and £5).

THE TITE PRIZE.

Luctor.—R. Shekleton Balfour [*A.*], 76, Inverness Terrace, W. (The Certificate and, under conditions of travel in Italy, £30).

Il Gondoliere.—Banister F. Fletcher [*A.*], 29, New Bridge Street, Ludgate Circus, E.C. (Medal of Merit).

Jonah.—Wm. Tait Conner [*A.*], 9, Scott Street, Garnethill, Glasgow (Honourable Mention).

Kismet.—D. W. Kennedy [*A.*], 14, Richmond Crescent, Barnsbury, N. (Honourable Mention).

THE GRISSELL MEDAL.

Quercus (*B*).—J. Fred. Fogerty [*A.*], B.E., 2, St. Peter's Terrace, Bournemouth (Ten Guineas only, the Medal not being awarded).

On the motion of the Chairman, who referred in sympathetic terms to the recent decease of Mr. Herbert A. K. Gribble [*A.*], architect of the Brompton Oratory, and called attention to the drawings representative of his executed works exhibited in the Meeting-room, it was

RESOLVED,—That a vote of sympathy and condolence with the widow and son of Mr. Gribble in the loss they have sustained by his death be entered on the Minutes; and that the thanks of the Meeting be tendered to them for the loan of the drawings exhibited.

Mr. R. Phené Spiers having read a short Paper descriptive of the drawings of the Pantheon at Rome executed by Monsieur Chedanne, and lent by the French Government to the Institute, a cordial vote of thanks was passed to Mr. Spiers, and the proceedings terminated at 9.15 p.m.

APPENDIX.

Deed of Award of Prizes and Studentships 1895.

TO THE GENERAL MEETING OF THE ROYAL INSTITUTE, HELD MONDAY, 7TH JANUARY 1895.

GENTLEMEN,—In pursuance of the terms of By-law 66, the Council have the honour to state that they have examined the work submitted for the two Silver Medals of the Royal Institute, the five Travelling Studentships, and the Grissell Medal.

THE ROYAL INSTITUTE SILVER MEDALS.

(i.) *The Essay Medal and Twenty-five Guineas.*

Eight Essays have been received for the Silver Medal—the subject being "The Influence of Literature on Architectural Development"—under the following mottoes:—

1. "Bid me Discourse."
2. "Ceci tuera cela."
3. Craigside.
4. Decus et Tutamen.
5. Patty Moon.
6. Research.
7. "Ye Skeptic."
8. A Would-be Writer.

The Council have great pleasure in recognising a much higher literary standard than has been attained in recent years, as well as an amount of thought and research that is creditable to the several authors. Most of the compositions are Essays in the true sense of the word, and are in a great measure free from the "padding" and unnecessary descriptive matter that have been noticed on many previous occasions. Four of the Essays may be placed in the first rank in the following order:—(1) "Bid me Discourse"; (2) "Craigside"; (3) Research; (4) "Ye Skeptic."

The Council have awarded the Silver Medal and Twenty-five Guineas to the author of the Essay bearing the motto "Bid me Discourse," and the sum of Ten Guineas to the author of the Essay bearing the motto "Craigside." They have also awarded Certificates of Honourable Mention to the authors of the Essays bearing the mottoes "Research" and "Ye Skeptic."

(ii.) *The Measured Drawings Medal and Ten Guineas.*

Seven sets of Measured Drawings were submitted for this Silver Medal under the following mottoes:—

1. Alpha:—Whitby Abbey (6 strainers).
2. Athelstan:—The Percy Shrine, Beverley Minster (5 strainers).
3. Christopher:—The Banqueting Hall, Kensington Palace (5 strainers).
4. Devonia:—Chapter House, Wells Cathedral (4 strainers).
5. Earendel:—Llandaff Cathedral (6 strainers).
6. Lady Margaret:—The Gateway of St. John's College, Cambridge (3 strainers).
7. Device (Halfpenny Stamp):—Church of St. Cuthbert, Darlington (5 strainers).

The Council have awarded the Silver Medal and Ten Guineas to the author of the drawings of the Gateway of St. John's College, Cambridge, being "No. 6. Lady "Margaret." They have also awarded a Medal of Merit

to the author of the drawings of Llandaff Cathedral, being "No. 5. Earendel."

THE TRAVELLING STUDENTSHIPS.

(i.) *The Soane Medallion and One Hundred Pounds.*

Eighteen designs for a "Gallery for the Exhibition of "Pictures and Sculpture" have been received under the following mottoes:—

1. Compass:—7 strainers.
2. English Renaissance:—5 strainers.
3. Device (Four Circles):—8 drawings.*
4. ΔΙΑ ΠΡΙΣΤΟΥ ΕΛΕΦΑΝΤΟΣ:—4 strainers.
5. Device (Lion's Head):—5 strainers.
6. National Renaissance:—7 strainers.
7. Osiris:—8 strainers.
8. Pietra:—4 strainers.
9. Primitiae:—5 strainers.
10. Pygmalion:—8 strainers.
11. Rathwell:—5 strainers.
12. Scallywag:—5 strainers.
13. Southern Cross:—4 strainers.
14. Sursum Corda:—7 strainers.
15. Westward Ho:—4 strainers.
16. Who builds a fane in some untrodden region of his mind:—7 strainers.
17. Device (Bird and Palette):—5 strainers.
18. Device (Kangaroo and T Square):—5 strainers.

* Not mounted on strainers, in accordance with the conditions, and therefore not exhibited.

The Council have awarded the Soane Medallion and (subject to the conditions laid down for the award of this Studentship) £100 for foreign travel to the author of the design bearing the motto "Southern Cross"; and Medals of Merit, and £5 with each, to the authors of the designs bearing the device and motto respectively of a "Lion's "Head" and "Scallywag."

(ii.) *The Pugin Medal and Forty Pounds.*

Seven applications have been received for the Pugin Studentship from the following gentlemen:—

1. Cecil Claude Brewer.
2. Dean John Brundrit.
3. Alfred Edward Corbett.
4. Frank Douglas.
5. Alfred John Dunn.
6. John Alexander Russel Inglis [*A.*].
7. Edwin Alfred Rickards.

The Council have awarded the Medal and (subject to the conditions laid down for this Studentship) £40 for home travel to Mr. Alfred John Dunn, and a Medal of Merit and Five Guineas to Mr. John Alexander Russel Inglis [*A.*]. The Council have further awarded a Certificate of Honourable Mention to Mr. Cecil Claude Brewer.

(iii.) *The Owen Jones Certificate and Fifty Pounds.*

Two applications have been received for the Owen Jones Studentship from the following gentlemen:—

1. Hubert Christian Corlette [*A.*]:—6 strainers.
2. John James Joass, *Pugin Student* 1893:—6 strainers.

The Council have awarded the Certificate and (subject to the conditions laid down for this Studentship) £50 for travel and study of colour as a means of architectural expression to Mr. John James Joass. They have also awarded a Medal of Merit to Mr. Hubert Christian Corlette [*A.*].

(iv.) *The Godwin Medal and Forty Pounds.*

Only one application has been received for this Studentship, and from the following gentleman:—

1. Albert William Cleaver [*A.*].

The Council have awarded the Medal and (subject to the conditions laid down for this Studentship) £40 for travel outside the United Kingdom to Mr. Albert William Cleaver [*A.*].

(v.) *The Tite Certificate and Thirty Pounds.*

Eleven designs for a "Garden Pavilion" have been received under the following mottoes:—

1. Black Knight:—4 strainers.
2. Firbolg:—4 strainers.
3. Il Gondoliere:—4 strainers.
4. Jubilate:—5 strainers.
5. Jonah:—4 strainers.
6. Kismet:—5 strainers.
7. Luctor:—4 strainers.
8. The Lady of Shalott:—4 strainers.
9. Vicenza:—4 strainers.
10. "Z":—4 strainers.
11. Device (Red "Wren"):—4 strainers.

The Council have awarded the Certificate and (subject to the conditions laid down for this Studentship) £30 for travel in Italy to the author of the design bearing the motto "Luctor." They have also awarded a Medal of Merit to the author of the design bearing the motto "Il "Gondoliere," and Certificates of Honourable Mention to the authors of the designs bearing the mottoes "Jonah" and "Kismet" respectively.

PRIZE FOR DESIGN AND CONSTRUCTION.

The Grissell Medal and Ten Guineas.

Eight designs for an "Independent Wooden Spiral "Stair," under the following mottoes:—

1. Christmas:—1 strainer.
2. "Eine Schwere Unsgabe":—2 strainers.
3. Helix:—2 strainers.
4. Gradation:—2 strainers.
5. Idris:—2 strainers.
6. Quercus (A):—4 strainers.
7. Quercus (B):—2 strainers.
8. Self-supporting:—2 strainers.

The Council have decided not to award the Medal. They have, however, awarded the sum of Ten Guineas to the author of the design bearing the motto "Quercus (B)."

In witness whereof the Common Seal has been hereunto affixed, this seventh day of January 1895, at a Meeting of the Council.

[*Here follow the corporate seal and signatures.*]

MINUTES. VI.

At the Sixth General Meeting (Ordinary) of the Session, held on Monday, 14th January 1895, at 8 p.m., Mr. F. C. Penrose, F.R.S., *President*, in the Chair, with 32 Fellows (including 14 members of the Council), 52 Associates (including 1 member of the Council), 5 Honorary Associates, and 59 visitors, the Minutes of the Meeting held 7th January 1895 [p. 191] were taken as read and signed as correct.

The following Associate, attending for the first time since his election, was formally admitted, and signed the Register, namely:—John Frederick Fogerty, B.E. (Bournemouth).

The President delivered an ADDRESS TO STUDENTS [p. 161].

Mr. R. Phené Spiers read a Summary of M. Chedanne's Report to the Académie des Beaux-Arts in Paris upon the Drawings made by him of the Pantheon at Rome; whereupon, on the motion of the President, seconded by Mr. E. W. Mountford [*F.*], President of the Architectural Association, it was

RESOLVED, that the members and students of the Royal Institute respectfully tender their most cordial thanks to the French Government for the loan of

the drawings of the Pantheon prepared by Monsieur Chedanne, during his fourth year's residence in Rome, as Pensionnaire of the Academy of France.

The President having communicated the same to Monsieur Chedanne, he acknowledged it on behalf of the French Government and himself.

Mr. J. M. Brydon [*F.*] having read a REVIEW OF THE WORK SUBMITTED FOR THE PRIZES AND STUDENTSHIPS 1895, a vote of thanks was passed to him by acclamation.

The President then made the following presentations to the Ashpitel Prizeman and the Travelling Students of last year:—

ASHPITEL PRIZE 1894 (Examination qualifying for Candidature as Associate): Books value £10. 10*s.* to Mr. WILLIAM EDWARD VERNON CROMPTON, *Probationer* 1891, *Student* 1892, *Qualified as Associate* 1894.

PUGIN STUDENTSHIP 1894: Medal and cheque for £40 to Mr. R. SHEKLETON BALFOUR [*A.*].

GODWIN BURSARY 1894: Medal and cheque for £20, being second moiety of the £40 for travel, to Mr. HARRY PERCY ADAMS.

The President then proceeded to present the Prizes and introduce the Travelling Students for 1895, in accordance with the Deed of Award [pp. 125, 191], namely:—

ROYAL INSTITUTE SILVER MEDAL AND TWENTY-FIVE GUINEAS (Essays): to Mr. ARTHUR THOMAS BOLTON [*A.*], for Essay under motto "Bid me Discourse."

Cheque for Ten Guineas to Mr. GEORGE L. SUTCLIFFE [*A.*], for Essay under motto "Craigside."

Certificate of Honourable Mention to Mr. J. HUMPHREYS JONES [*A.*], B.A. Lond., for Essay under motto "Research."

Certificate of Honourable Mention to Mr. ALFRED C. HOUSTON [*A.*], for Essay under motto "Ye "Skeptic."

ROYAL INSTITUTE SILVER MEDAL AND TEN GUINEAS (Drawings): to Mr. W. HENRY WARD [*A.*], for his drawings of the Gateway of St. John's College, Cambridge, under motto "Lady Margaret."

Medal of Merit to Mr. JOHN H. JAMES (Cardiff) for his drawings of Llandaff Cathedral, under motto "Earendel."

SOANE MEDALLION and, under conditions of foreign Travel, One Hundred Pounds: awarded to Mr. HUBERT S. EAST [*A.*] (Tasmania), for his design for a Gallery for the Exhibition of Pictures and Sculpture, under motto "Southern Cross."

Medal of Merit and cheque for £5 to Mr. C. H. B. QUENNELL, for his design under the device "Lion's "Head."

Medal of Merit and cheque for £5 to Mr. HARRY JEFFERIS [*A.*] (Sydney), for his design under motto "Scallywag."

PUGIN STUDENTSHIP: awarded to Mr. ALFRED JOHN DUNN (Gloucester).

Medal of Merit and cheque for £5. 5*s.* to Mr. JOHN ALEXANDER RUSSEL INGLIS [*A.*].

Certificate of Honourable Mention to Mr. CECIL CLAUDE BREWER.

OWEN JONES STUDENTSHIP: awarded to Mr. JOHN JAMES JOASS.

Medal of Merit to Mr. HUBERT CHRISTIAN CORLETTE [*A.*] (Sydney).

GODWIN BURSARY: awarded to Mr. ALBERT WILLIAM CLEAVER [*A.*].

TITE PRIZE of a Certificate and, under conditions of Travel in Italy, Thirty Pounds: awarded to Mr. R. SHEKLETON BALFOUR [*A.*], for his design for a Garden Pavilion under motto "Luctor."

Medal of Merit to Mr. BANISTER F. FLETCHER [*A.*], for his design under motto "Il Gondoliere."

Certificate of Honourable Mention to Mr. W. TAIT CONNER [*A.*] (Glasgow), for his design under motto "Jonah."

Certificate of Honourable Mention to Mr. D. W. KENNEDY [*A.*], for his design under motto "Kismet."

GRISSELL MEDAL AND TEN GUINEAS: The Medal not awarded, but the sum of £10. 10*s.* presented to Mr. J. FRED. FOGERTY [*A.*] (Bournemouth), for his design for an "Independent Wooden Spiral "Stair" under motto "Quercus (B)."

A vote of thanks having been passed to the President for his Address and the Presentation of Prizes and Studentships, the proceedings terminated, and the Institute adjourned at 10 p.m.

PROCEEDINGS OF ALLIED SOCIETIES.

LIVERPOOL.

Architecture as a Necessary Element in National Economy. By Alderman P. H. Rathbone.

Read before the Liverpool Architectural Society on 3rd December 1894.

The Report of the Liverpool Commission on the Unemployed has forced into prominence a great peril which threatens the future prosperity of Liverpool, namely, the increasing surplus of unskilled labour which yearly inlarges the ranks of the unemployed. The nominal wage of a dock labourer, 4*s.* 6*d.* per diem, or 27*s.* a week, crowds the town with unskilled labour from the surrounding districts, where weekly wages are much lower. The consequence is that the average labourer gets about three days' work a week, or from 13*s.* to 15*s.* a week, so that the employer is dividing 27*s.* between two men to do the labour of one, and starving both instead of preventing the waste of labour and money by paying the sufficient weekly wage of 21*s.* for the same amount of work done by one. Nor is this state of things likely to improve. If the trade of the port is not to decline, greater economy will have to be used in the cost of loading and unloading vessels. That economy will be effected by the substitution of machinery for manual labour. The necessity for extra pressure at certain seasons, and the kind of work required at the docks, render the substitution of machinery for manual labour of much greater importance than in other industries. A machine when not working does not consume coal, and the coal that it would have consumed had it been at work is saved; whereas a manual labourer's day's work, if not employed, is lost for ever. It costs as much, or nearly the same, to keep a man alive whether working or not.

There is another difficulty in view. The absolute necessaries of life—food, clothing, and lodgment—can now be supplied in greater quantities than they can be paid for. They could be supplied in greater quantities than they could be consumed. Hence the overglut of markets. Even the amount of necessaries that ought to be consumed, if every one had enough, cannot be paid for, because those who have had no work to do have nothing to offer in return. The question resolves itself into this: The necessaries of life being provided by the labour of a fraction of the population, how are we to provide employment for the remainder, and so enable these latter to remunerate the providers of necessaries? The answer is, that man shall not live by bread alone, but by every word of God, and God's words include love of beauty, patriotism, and man's desire for the permanent expression of a nation's highest feelings and desires. A man is not the noble being that he is intended to be if he is compelled to restrict all his faculties to keeping himself alive by eating, drinking, and

keeping himself warm. He only emerges out of barbarism as his desires, wants, and mental conceptions enlarge.

The wealth of a country, really considered, consists in its possession of the means of enlarging those powers and of supplying the wants created by them. In proportion as the wants, desires, and variety of life increase, the nation becomes more civilised; but the character of that civilisation is very different in different countries. It may be either of a transient or of a permanent character.

The first enjoyment beyond that of satisfying mere animal propensities was provided by rivalry, first between one individual and another, then, as civilisation progressed, between communities. Hence the early history of all nations emerging out of savagery is the history of wars undertaken more for the purpose of a certain pre-eminence than for any other object. By-and-by, however, as human nature enlarged, man began to find out that he was much greater as a part of a gigantic whole, than as a mere atom compared with the forces around. Then the tendency to combine developed. First, this would comprise the family; and those nations which have begun by making the family the basis of their national life have had the most permanent civilisation. During the nomad period of a nation's history, civilisation does not very much advance, as combination is limited to the family. When, however, the nation settles down into cities, family ties develop into municipal loyalty, working to obtain all objects that shall tend to the glory and pre-eminence of the city and its inhabitants. Wealth begins to accumulate, and one city becomes wealthier than another by fortunate accidents, such as the fertility of the land around it, or that its situation makes it used as a convenient centre for the surrounding nations to exchange their products.

Such, briefly, is the origin of a city's prosperity; the permanence of that prosperity depends upon the use it makes of the wealth it thus accumulates. If the nation spends it in transient means of civilisation, its civilisation is not permanent. Carthage was once apparently as wealthy as Rome; it expended its wealth in unprofitable ways, and in the costliest modes of satisfying the animal appetites. The consequence was, that when its factitious advantages disappeared, the city also disappeared for ever. Athens expended fifty years of its extra command of labour in building a Parthenon, and the Parthenon has enabled Athens, after being centuries submerged by misfortune, to rise again. Venice at one time, through her position, became the centre of trade to the East, and employed her wealth in raising a city of glorious palaces. By the discovery of the Cape passage to India she lost that advantage; her trade disappeared, but St. Mark's and her palaces remained. She was conquered, but she rose again, and still remained one of the great cities of Europe. Tyre had once the opportunities of Venice, and now her site is almost forgotten. She was capable, we are told, of the most luxurious and extravagant living; she wasted her wealth, and disappeared for ever.

The reason is simple enough. You cannot get a sense of citizenship by any amount of meanly built and ignoble streets; but you can create a warm and living affection by the erection of noble public buildings, remarkable not only for their size, but for that beauty of decoration which formulates the nobler and finer feelings and ideas of the citizens, and stand day by day as living witnesses that the life lived in that city by its inhabitants has been one not unworthy of the highest and most developed form of humanity. This is true of architecture, as it is of no other form of art or literature. The Church of Or San Michele in Florence was paid for by the different guilds of merchants, stockbrokers, traders, and craftsmen. It was worked out by the skilled artisans of the city. The consequence is, that in no city is there so strong a sense of municipal loyalty as in Florence. Depend upon it the future greatness of cities will be in proportion to the skill of their artisans. In proof of this we have to look no further than to Paris. Where would Chester, that once important city, be now if it were not for its buildings?

Therefore I do not think I am going too far in saying that the future of Liverpool, as a city containing a large and intelligent body of men fitted to be leaders of civilisation, will depend upon our success in educating and employing a large body of skilled artisans, and in giving to Liverpool monuments and buildings which will create a society, spreading from top to bottom, to which the best of all classes will be proud to belong; otherwise, Liverpool may gradually sink into a mere port through which will pass the wealth of the world into cities which will know how to appropriate and employ it; and no one will live here, who is not forced to do so in order to supply the merest necessities of life. We trust, therefore, the new School of Architecture and its Applied Arts will receive the fullest recognition and assistance from our municipal authorities and the public; for, small as the beginning is, it may attain to dimensions which may save Liverpool from being a mere poverty-stricken asylum for unemployed unskilled labour; for carrying out, so to speak, the porterage of the country and exercising other menial employments, and will instead make her a centre of the highest and best aspirations of humanity, as formulated in buildings which will rouse the respect and admiration of mankind for centuries.

The magnificent steamers of which Liverpool is now so proud will not last fifty years, and a diversion of trade may at any time transfer them from Liverpool to another port. Some of these cost half-a-million, and half-a-million judiciously employed might construct a building which would be celebrated throughout the civilised world, and be a centre of attraction to travellers from all parts.

The work which we have done in sewering and paving and providing water for the town is admirable, but it is not a visible source of attraction, and I fear that a dull and unintellectual town, however healthy, would have a tendency to sink down toward the lower and more animal plane of life, while all that contributes to the charm, variety, and depth of a higher form of life and civilisation will be gradually drawn away to those cities which know how to cherish and value these blessings.

Owing to the telephone and telegraph, people can transact business at a distance, and the great master minds will settle themselves where there is most intellectual life and enjoyment going on, and leave to the mere hewers of wood and drawers of water to occupy the backyards and outbuildings of civilisation, there to pursue their dreary round of daily labour for a bare subsistence; and while the money is made in Liverpool, it will be spent in more intellectual centres.

Be it well understood that architecture is almost the only means of enforcing a visible and unmistakable impression of the greatness and intellectual superiority of a town. Other evidences there are, but they do not force themselves on the attention, and have to be sought for; and Oxford herself, with her libraries and her colleges, would not have half the hold upon English affections and honour which she enjoys if it were not for the noble buildings in which those colleges are enshrined. The cities of Holland—wealthy, intellectual, with a history of which any nation might be proud—nearly dropped out of the consideration of the civilised world because, having no very remarkable buildings, they ceased to attract the attention of travellers; and had it not been for their picture galleries this would have been even more the case.

With all its enormous wealth fifty years ago, no one would have thought of comparing London as a centre of civilisation with Paris; but the rapid strides it has made in buildings of a really first-class character have placed it in an entirely new position amongst the capitals of Europe. During the fifty years we in Liverpool have not completed a single building that can be reckoned amongst the chief

buildings of Europe, nor throughout England has there been constructed a single cathedral which can in the least take rank with the glorious buildings of the Middle Ages, and which give to such towns as Rouen, Rheims, &c., an undisputed place amongst the centres of civilisation in Europe. Nothing is wanting but will to enable us to do this; we have the wealth in abundance, and we use it in building docks for Buenos Ayres; we have men quite capable of conceiving the idea, and we have a population which, with instruction, might become the finest body of skilled artisans in the world. It is mere childishness to neglect the necessary means of keeping Liverpool in the van of civilisation. In a few years it may be too late, because other countries and cities in England are doing work which will place them so far in advance of us that we shall wake up to find ourselves hopelessly behind in the race of civilisation.

THE YORK SOCIETY: ANNUAL DINNER.

On the 5th January the annual dinner of the York Architectural Society was held at the White Swan Hotel, York, the President, Mr. H. Perkin [*F.*], in the chair, the vice-chairs being filled by Mr. J. Lane and Mr. A. W. Turner. There were also present: The Rev. G. H. Hewison, Messrs. G. Bailey, J. B. Sampson, T. P. Bulmer, G. B. Bulmer [*F.*] (Leeds), F. W. Bedford [*A.*] (Leeds), A. Pollard (Past President), E. Pollard, A. Hirst, Watson Hirst, W. Hepper (ex-President), A. P. Skeat, J. S. Addenbrooke [*A.*], G. W. Milburn, W. T. Whincup, H. H. Humphries, A. H. Claypoole, T. Sawyer, F. W. Cull, R. C. Laurence, Fred. Taylor, J. T. Pegge, J. Duck, S. R. Kirby, F. Curry, A. J. Penty, G. Benson, A. B. Burleigh (Hon. Sec.), N. R. Yeomans (Hon. Treasurer), W. E. Walker, W. Bennett, G. H. Stott, J. R. Masterman, W. H. Dawson, A. Sample, J. Loftus, and R. A. Parkin.

The Chairman gave the loyal toasts, which were heartily responded to.

Mr. A. Pollard proposed "The Royal Institute of "British Architects and Kindred Societies." He said that changes had taken place in almost everything during the present century. Having regard to the fact that the Royal Institute had been in existence for so long a period, it was to him a matter of surprise that those associated in the past with that noble Society had been so reticent as to the provincial members of the profession. They had failed in a great measure to fully realise the influence the provincial architect must have on the country. Undoubtedly in London, where the best of everything could be found, it was only reasonable to expect that there they had the pick; but in recent years it had been clearly proved that they should have some regard to other centres which were of moment and should be considered. If it had not been for the energy displayed in commercial centres away from London, the advantages to be derived by the present generation would not have been attained. The head centre could command the support of men of high intellectual attainments, and could also draw on the many learned Societies around them. He thought that if it were possible they might extend a little of their knowledge to provincial architects by arranging a series of lectures, so that they might acquire information of such great value without incurring the expense of going to London. The alliance of provincial Societies had put them on the most favourable footing, for it had enabled them to send representatives to the Royal Institute.

Mr. G. B. Bulmer [*F.*] responded for the Institute. He said that he had the honour of sitting at the Board of the Institute, and he would ask the York Society to continue the support that they had so nobly given to the Institute already. He said that when the York Society was first formed there was a little jealousy felt at Leeds; but when they took account of the spirited manner in which the York Society had conducted its affairs, all feeling of jealousy was expelled, and it gave them at Leeds the greatest pleasure to offer the hand of good-fellowship. The object of the provincial Societies was to push forward the interests they had at heart, and those interests were the consolidation of the architectural profession, with the view of getting it recognised by the public in a way in which it had not hitherto been recognised. They desired to consolidate their profession, and maintain centres which would enable them to disseminate something for their benefit. There was no provincial Society which was not aiming at providing means for young men to learn the details of their profession, which it was most essential for them to learn. There were gentlemen who did not agree with them, as they said they could not make an architect by education; they could not make an artist by education—it must be inborn. That was true, but they stopped there. The Societies went further, and said that a man who is an artist would be all the better for having a thorough education and a thorough grounding in the details of his profession which could be mastered by any well-balanced mind; and the object of the Royal Institute and the provincial Societies was to see that those opportunities were offered to architects which they had been prevented from attaining in the past. Why men should try and balk such an object, and one fraught with so much good, passed his comprehension. He looked forward to seeing the provincial Societies in a strong position, and trusted that they would show great power of growth. There was an enthusiasm amongst them which in the future would bear fruit, and that was not more strongly shown in any Society than it was in the York Society. It was, he said, the desire of the Institute to bring the provincial Societies as closely into touch with themselves as possible, and they would welcome any communication or inquiry from the provincial Societies with the view of helping them as far as they were able to do so. The suggestion made by Mr. Pollard was, he said, met to a large extent by the publication by the Institute of the JOURNAL in its present form.

Mr. F. W. Bedford [*A.*] replied for the "Kindred Societies."

The Rev. G. H. Hewison proposed "The York Archi-"tectural Society." He said the architect's profession was a most difficult one; he did not think that there was any other profession in which such a variety of knowledge could be brought to bear. He lamented the action of the York School Board, that it had not thrown open its architectural work to competition. From first to last he had always advocated that it should be done. There had been great improvement in domestic architecture during recent years, and they were very much indebted to the architects for the beauty of the streets and the health and comfort of their houses.

The President, in reply, congratulated the Society upon the fact that its alliance with the Royal Institute had been accomplished, and he thought that, as York was the centre of a very large architectural district, each architect within the boundary allotted by the Institute should be invited to join their ranks, for his own individual advantage and for the purpose of strengthening the Society. He regretted that there were architects in good practice in York who had hitherto held themselves aloof. He did not know if it was possible to induce them to become associated with it. He urged students to go in and win the prizes that were offered. There should be no lack of opportunity for study in a city like York. He alluded to the specimens of stained glass in the Minster, and said that there was no other glass that could compare with it. He of course excepted the modern glass which had been inserted in later years, in the north and south transepts. That in the north transept was of the worst possible description, and the figures in the windows in the east aisle of the south transept had a very distorted appearance, which suggested to his mind that they should have been placed at a very much higher elevation. Why did the authorities permit such glass to spoil the Cathedral? Could it be possible

that they appreciated the fact that the modern work acted as a foil to the ancient glass? As to the repairs that were constantly needed to the exterior of the Minster, it would appear from the decay into which it was falling that the funds were quite inadequate for efficient renovation. He asked if it was not competent for that Society to make a representation to the Dean and Chapter suggesting that they should make a supreme effort to obtain the necessary sums required for the next twenty years or so. If a further appeal were made, some large-hearted Churchman would respond with substantial help, as in the recent case of Peterborough Cathedral. The drainage scheme when completed should have the tendency to dry the subsoil and render the ground more suitable for the development of building estates. He had heard that it was contemplated to enlarge the railway station. He suggested that, in order to develop building estates in the vicinity of Hob Moor and Bootham Stray, suburban stations be placed there. Was it possible that in the future the river would have its complement of passenger steamers, as in London and Paris? He spoke of the unsatisfactory way in which building estates were developed, by property of inferior value being dovetailed in between high-class properties, which must have a tendency to reduce the value of the latter. He went on to remark on the lack of artistic design in the erection of small-class houses. Surely it was possible to impart some artistic feeling and colour effect at moderate cost. He spoke of the work which had been carried out in the city and neighbourhood, and what was in contemplation, and said that business should be brisk for some time to come.

The toast of the "Sister Arts and Sciences" was proposed by Mr. Lane, and responded to by Mr. A. W. Turner; and the toast of "The Visitors," by Mr. William Hepper, and responded to by Mr. John Sampson.

THE LONDON COUNTY COUNCIL.

FREE TECHNICAL EDUCATION IN LONDON.

On Monday, 17th December 1894, the Lord Chancellor presented certificates to the Junior County Scholars appointed in June and November last, the Intermediate County Scholars appointed last June, the Senior County Scholars appointed in October, and to the Art Scholars and Exhibitioners and the Domestic Economy Scholars. There were 5 Senior, 50 Intermediate, and 517 Junior County Scholarship Certificates. 78 Certificates to Art Scholars and Exhibitioners, and 54 Domestic Economy Certificates. The Chair was taken at 8 p.m. by Sir John Hutton, the Chairman of the Council, but the recipients of the certificates and the members of the audience were in their places by 7.30 p.m., and were entertained by an organ recital by Mr. Josiah Booth until 8 o'clock, though the recital was interrupted for a few minutes in order to arrange for the presentation by the Misses Hutton of about 270 bouquets, the gift of the Chairman, to the girls who were about to receive certificates. Nearly all the girls were provided with seats in the orchestra, and, when the Chairman entered, accompanied by the Lord Chancellor, they rose and waved their bouquets, producing a very pretty effect. In introducing the Lord Chancellor the Chairman said:—

My Lord Chancellor, Ladies and Gentlemen,—This evening the Technical Education Board is taking one further step towards the realisation of its immediate hope that the time will not be far distant when the scholarships will amount to the value of £30,000 per annum. In considering the constitution of the Board it would be impossible not to refer to one whose services upon that Board have been of great distinction, and who seems to live for the purpose of promoting technical education—I refer, of course, to Mr. Sidney Webb. I shall be neglecting a duty, however, if I omit to mention the name of our admirable and zealous secretary, Dr. Garnett. The source of the income of the Technical Education Board is, in my opinion, a very questionable source. It comes from the beer and spirit duties, and I hope that the day may some time come when the Bill for drink will change places with the Bill for education. A sign that we might look for assistance from healthier channels is given in the offer of the Trustees of the Norwood Institute to transfer, subject to certain conditions, the valuable lease with forty-three years unexpired at the nominal ground rent of £23 per annum. I trust that these gifts may be more numerous. For the Senior County Scholarships, of the estimated value of £100 per annum for three years, there were 61 competitors. Five survived the ordeal. There were 348 candidates for the Intermediate County Scholarships, and 50 were appointed. The school fees and money value of these scholarships are £40 a year. One satisfactory feature is the steady growth in the number of candidates for the Junior Scholarships. In November 1893, 960 candidates presented themselves. In May of the present year there were 1,133 candidates, but in October there were 1,307 representatives from no less than 346 elementary schools in the county. Those who have passed the examination are 179 girls and 338 boys, making a total of 517. These scholarships represent the money value of £20 and two years' free schooling. From forty-six schools of art there were 78 successful competitors for Art Scholarships; 54 girls have passed in domestic economy, and will obtain free education for six months. This produces a grand total of 704 successful students, and I am sure that those who to-night will receive the certificates as a result of their arduous labour will find added greatly to it the honour of receiving them at your Lordship's hands.

The Lord Chancellor then presented the certificates, and afterwards addressed the meeting.

In rising to propose a vote of thanks to the Lord Chancellor, Mr. Sidney Webb, the Chairman of the Technical Education Board, said:—

Ladies and Gentlemen,—Let me ask you to express your thanks to Lord Herschell for so kindly giving away our certificates. I do not forget that he comes here in a double capacity. He is, as Lord Chancellor, a member of Her Majesty's Government, and we value his having come among us, in the midst of great pressure of work, as some testimony that Her Majesty's Government do not overlook the work done by the London County Council and the Technical Education Board, a body which is endeavouring to do in a humble sphere what the Government are doing in a higher sphere. He is also the head of our great University. He stands here to-night as the leader of the chief educational system of London, if we may call it a system. Who knows but that among those who are here to-night there is to be found the future Lord Chancellor, if that office exists for so long a time? We may assure him that we are preparing the students for the Teaching University of London which we look to him to give us at no distant date. I cannot close without expressing the hope that this is only an earnest of what he will do for us in the future. I have much pleasure in proposing a vote of thanks to Lord Herschell.

The Hon. E. Lyulph Stanley, Sir Henry Longley, K.C.B., Chief Charity Commissioner, and Sir Owen Roberts, M.A., D.C.L., of the Clothworkers' Company and the Technical Education Board, also addressed the Meeting.

Erratum.—In the report of the case of *The Vestry of St. Mary, Battersea*, v. *Hudson* [Legal, p. 160], which was taken from the *Law Journal*, the names of the counsel for the plaintiff and defendant respectively were accidentally transposed. Mr. Young was for the summons, and Mr. Gover for the defence.